

Reports from the Department of Philosophy

Vol. 37

# **Animal Experience in Kant's Philosophy**

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Turun yliopisto  
University of Turku

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ISSN 1457-9332

ISBN 978-951-29-6411-6 (PRINT)

ISBN 978-951-29-6412-3 (PDF)

Painosalama Oy, Turku, Finland 2016

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The originality of this thesis has been checked in accordance with the University of Turku quality assurance system using the Turnitin OriginalityCheck service.

## *Acknowledgements*

First of all, I want to thank my supervisors, Olli Koistinen and Juha Räikkä. Olli's expertise in early modern philosophy has been an important source of inspiration for this work, and Juha has had the patience to provide encouragement and practical advice whenever I have needed it. I also want to thank Martina Reuter (University of Jyväskylä) and Miira Tuominen (University of Jyväskylä) for the careful inspection of this work and insightful comments.

An important step in this project was defending my licenciate thesis that served as a basis for this study. I want to thank Mikko Yrjönsuuri and Valtteri Viljanen for examining it. I also want to thank the Turku University Foundation, the Faculty of Social Studies and Seivästö Foundation for financial support in the final phases of the research. Additionally, I am thankful for Marion Lupu for checking the language and Tina Shukla for editing.

I am also grateful for Markku Oksanen and Helena Siipi for making this work possible by giving me the opportunity to work in their research projects. Markku also deserves special thanks for all the mentoring concerning animal philosophy.

It has been a privilege to work in the Division of Philosophy at the University of Turku where the atmosphere is warm and supportive. The meetings of the rationalist circle have always been inspiring, so I want to thank all the members. I also want to express my gratitude to Markus Nikkarla, Hemmo Laiho, Jani Sinokki, Joseph Almog and Valtteri Arstila for patiently reading parts of the manuscript and giving their valuable insights on it. I also want to thank Susanne Uusitalo, Mika Hämäläinen

## *Acknowledgements*

and Rosa Rantanen for sharing the pains and joys of doctoral studies, and Hanna-Mari Salonen for being an indispensable help in all kinds of practical matters.

I started this project as a doctoral student funded by the Doctoral School of Animal Welfare (currently ANIWEL). I am grateful for the long-lasting interdisciplinary contacts that this period has offered me. Among these are Birgitta Wahlberg, Satu Raussi, Noora Schuurman, Tiina Kauppinen and Laura Hänninen. Tiina and Laura deserve special thanks for checking that the dietary, biological and behavioral details of the animals I used in examples are correct. The inspiring multidisciplinary collaboration has continued in YKES, the Finnish Society for Critical Animal Studies. I want to thank all the members I have had the pleasure to work with, especially Outi Ratamäki, Sami Torssonen and Jouni Teittinen.

My husband Henry has been an important support for me during this project. I want to thank him not only for that but also for the professional consulting concerning the neurological terminology. I am grateful for the support and trust my parents Maikki and Vesa have provided. Finally, I want to thank my children Kerttu and Väinö just for existing, bringing joy to my life and sharing their original insights on any subject.

## *Abstract*

The role of animals in the philosophy of mind is primarily to help understand the human mind by serving as practical examples of cognition that differs from ours either in kind or in degree. Kant regarded animals as beings that only have the faculty of sensibility. By examining what Kant writes about animal experience we gain knowledge concerning the role of sensibility in experience, free from the influence of understanding and reason.

I look at Kant's view of animals in the historical context of alternative views presented by Descartes' and Hume's views. Kant's view can be seen as a counterargument against Descartes' doctrine of animal machines according to which animals do not have minds and they do not think. I suggest that while it can be argued that some kind of elementary experience could be possible in the physiological level, this only makes sense when it is possible to become conscious of the unconscious sensation, and this requires a mind.

A further option is to claim that there is only a difference in degree between human and animal cognitive capacities. This is Hume's view. I argue that even though Kant's and Hume's view on the cognitive capacities of animals seems to depart from each other to a considerable extent, the differences between them diminish when the focus is on the experience these capacities enable. I also briefly discuss the relation of the metaphysics of animal minds to animal ethics.

**Keywords:** philosophy of mind, early modern philosophy, animals, sensibility, experience

## ***Tiivistelmä***

Eläinten rooli mielenfilosofiassa on ensisijaisesti auttaa ymmärtämään ihmismieltä toimimalla esimerkkeinä kognitiosta joka eroaa omastamme asteeltaan tai laadultaan. Kant piti eläimiä olentoina, joilla on vain aistimellisuuden kyky. Tutkimalla, mitä Kant kirjoittaa eläinten kokemuksesta, saadaan tietoa ymmärryksen ja järjen vaikutuksesta vapaan aistimellisuuden roolista kokemuksessa.

Tarkastelen Kantin näkemystä myös suhteessa sitä historiallisesti lähellä oleviin Descartesin ja Humen vaihtoehtoiisiin tapoihin lähestyä eläinten kokemusta. Kantin eläinkäsitys voidaan nähdä vasta-argumenttina Descartesin eläinkoneopille, jonka mukaan eläimillä ei ole mieltä eivätkä ne ajattele. Vaikka on ajateltavissa, että jonkinlainen alkeellinen kokemus olisi mahdollista fysiologisella tasolla, tällainen kokemus tulee merkityksellisesti vasta kun siitä on mahdollista tulla tietoiseksi, ja tähän vaaditaan mieli.

Toisaalta voidaan esittää, että eläinten ja ihmisen kognitiiviset kyvyt eroavat vain asteeltaan. Tämä on Humen näkemys. Väitän että vaikka Humen ja Kantin käsitykset eläinten kognitiivisista kyvyistä eroavat toisistaan merkittävästi, niiden väliset erot kapenevat kun tarkastellaan heidän käsityksiään eläinten mahdollisesta kokemuksesta. Pohdin myös lyhyesti eläinmielten metafysiikan suhdetta eläinetiikkaan.

**Avainsanat:** Mielenfilosofia, varhaismoderni filosofia, eläimet, aistimellisuus, kokemus

## *Abbreviations*

### **Descartes's writings:**

AT	Descartes' collected works edited by Adam, Charles and Tannery, Paul. 11 vols.
CSM	The Cambridge edition of Descartes' works. 3 vols.
Discourse	<i>Discours de la Méthode pour bien conduire sa raison et chercher la vérité dans les sciences</i>
Meditationes	<i>Meditationes de Prima Philosophiae</i>

### **Kant's writings:**

Ak.	<i>Akademie-Ausgabe</i> of Kant's collected works. 29 vols.
A/B	The first and the second edition of <i>Critique of Pure Reason</i> .
BF	<i>Beantwortung der Frage, ist es eine Erfahrung, daß wir denken?</i>
Anthr.	<i>Anthropologie in pragmatischer Hinsicht</i>
Collin	<i>Collin's Lecture Notes</i>
FS	<i>Die falsche Spitzfindigkeit der vier syllogistischen Figuren</i>
Dohna	<i>Metaphysik Dohna</i>
GMS	<i>Grundlegung zur Metaphysik der Sitten</i>
Herder	<i>Metaphysik Herder</i>



## ***Abbreviations***

JL	<i>Jäsche Logik</i>
KpV	<i>Kritik der praktischen Vernunft</i>
KrV	<i>Kritik der reinen Vernunft</i>
KU	<i>Kritik der Urteiskraft</i>
L1	<i>Metaphysik L1</i>
L2	<i>Metaphysik L2</i>
MM	<i>Metaphysik Mrongovius</i>
MS	<i>Metaphysik der Sitten</i>
Träume	<i>Träume eines Geistersehers, erläutert durch Träume der Metaphysik</i>
Volckmann	<i>Metaphysik Volckmann</i>

### **Hume's writings:**

EHU	<i>Enquiry Concerning Human Understanding</i>
EPM	<i>Enquiry Concerning Principles of Morals</i>
T	<i>A Treatise of Human Nature</i>

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# ***1. Introduction***

## **1. INTRODUCTION**

*For, that [the human] has reason does not at all raise him in worth above mere animality if reason is to serve him only for the sake of what instinct accomplishes for animals.*

Immanuel Kant, KpV, Ak. 5:61–2

### **1.1. WHAT AND WHY?**

In this study, my purpose is to look deeply into Kant's view of non-human animals.<sup>1</sup> In particular, I will focus on how animal minds are different from human minds, and how this affects experience. I will do this by first introducing the problem of animal experience from the point of view of contemporary philosophy and cognitive ethology, and then by giving a detailed analysis of why this was Kant's view of animals by contrasting it with two other views, Cartesian mechanism and Humean rationality. Apart from illuminating the characteristics of Kant's view, they also build the context in which Kant discussed the issue of animal experience. A great deal of this discussion concerns the definition of reason. What exactly does reason do, and what cognitive operations can be explained as a sensible association that does not amount to the use of reason? The answers that Descartes, Kant and Hume give to this problem are very different, as we will see.

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<sup>1</sup> For the sake of brevity, from now on I will refer to non-human animals simply by the word 'animals'. I will discuss this decision in more detail in Chapter 1.4.

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This study offers a detailed analysis of the mental faculties that are traditionally considered “animal” by firstly articulating some possible views on animal experience. The Cartesian view, for example, is provoking and is mentioned in many texts related to animal philosophy, rarely in a laudatory manner. It is, however, one possible way to conceptualize animal experience. It is a different matter, however, whether it *should* be seen in a Cartesian manner, and whether the view is true.

Secondly, through these historical examples, this study discusses the issue of what can be known of animal experience on the whole. An important application of this knowledge is using it in ethical reasoning concerning the treatment of animals. My focus here is in the philosophy of mind, but I consider the possible ethical implications of this discussion so important that I also want to spend some effort in this issue.

The fact that animals are in many respects similar to humans has made people throughout the ages wonder how close are the similarities between us. We cannot linguistically communicate with animals to the same extent that we can with other humans, so how can we know anything about the principles behind their behavior?<sup>2</sup> Are they the same that we have? This study approaches this question from the viewpoint of early modern philosophy.

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<sup>2</sup> Of course, the possibility of verbal communication does not straightforward imply that we gain profound and objective understanding concerning the principles of action. People can lie, or they simply might not be aware of these principles. However, if we could verbally discuss with a dairy cow, for instance, it would be simple to ask her point of view of her treatment at the hands of human beings.

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For the most part, this study is about the analysis of cognitive capacities and serves to give an overview of the different ways to approach these faculties. This theoretical understanding of cognitive capacities is applied to animals. Animals are seen as beings equipped with certain cognitive capacities, and they can serve as a touchstone for this theory: if animals are defined as beings that have the cognitive capacities  $a + b + c$ , does this suffice to explain their behavior? I will also look at how Descartes, Kant and Hume argued for their views of the cognitive capacities that must be attributed to animals to explain their behavior. However, in the last resort, Descartes and Kant thought that in reality we can never attain certain knowledge concerning the constitution and the content of animal minds.

Why, then, approach the problem of animal experience from Kant's perspective? Hardly anyone can deny the importance of Kant's careful and thorough analysis of human understanding that culminated in his *Critique of Pure Reason*, one of the most influential works in Western philosophy. This first *Critique* is a detailed exposition of the three faculties of human reason, that is, sensibility, understanding and reason, defining what these faculties can do and—what is perhaps even more important—what they cannot do. According to Kant's understanding, animal cognition is restricted to sensibility. The role of animals in Kant's philosophy is thus to serve as examples of what sensible cognition is capable of without understanding or reason. Moreover, animal behaviour serves as an example of action that is based on such cognition. In the framework of Kant's philosophy, animal behaviour tells us something important about the possibilities of sensible cognition. I claim that it offers a rich representation of the world, and it enables a variety of



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behaviour from building and maintaining social relations to empirical learning.

The alternative way to approach sensibility is to treat it as a faculty that becomes relevant to experience only when combined with the higher cognitive faculties, understanding and reason. It is important to articulate carefully the role of sensibility in experience, since it is crucial in answering the questions we are faced with when we think about what is unique in being a human compared to being an animal. In what respects is human behaviour different from animal behaviour? That is, what do the higher cognitive faculties add to the possibilities of action? It is often argued that these higher faculties entail concepts and language. Now we can ask, whether these skills have any impact on experience. Is, for example, the experience of pain essentially similar for humans and animals, or does the capacity of conceptual thought add something to it?

This study is not an answer to the question, what animal experience *really* is like. That is, I think, a question a philosopher cannot answer, and that would require expertise from the field of cognitive ethology. This rather serves as a touchstone of our conceptions of animal minds and animal experience through the examples of early modern philosophy. There are also important ethical issues related to our conception of what kind of experience animals can have. In particular, the question of animal suffering—whether animals feel pain and whether it matters to them—should matter to us, at least when making ethical decisions concerning animals. This study offers a historical background to our prevalent views concerning animals and, as astounding as it might seem, Kant's anthropocentric ethics does in fact offer such guidelines con-

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cerning the treatment of animals; and, if taken seriously, questions the morality of many current practices of animal use.

Why is it important to investigate earlier views of animals? The theory of evolution has given us evidence of biological as well as cognitive continuity between species; and the recent findings of cognitive ethology have given us vastly new knowledge concerning animal cognitive capacities. Why stick with outdated views? If the primary aim was to investigate, for example, the necessary and sufficient mental capacities for the mental processes of external inputs to count as experience, then historical views would not be relevant but the study would have to rely on the best contemporary research available. My approach, however, is historical and theoretical, and the aim is to understand Kant's view of animal experience and the role of sensibility. Furthermore, the discussion concerning animal minds and the concepts that are used in this discussion (such as 'perception', 'experience' and 'consciousness') do have their historical background. A historical scrutiny thus helps us to better understand them.

Even though the views presented in this work are historical, they all propose different ways to perceive animals. In some contexts, animals are seen and treated as Cartesian machines; in other contexts as Humean rational beings. Intensive broiler chicken production is an example of treating animals as machines with only an instrumental value whereas pets are often regarded as equal family members. The theory of evolution and the findings of cognitive ethology do not definitely imply a certain understanding of animal minds. Even though the theory of evolution suggests that there are no strict dividing lines between species, some

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authors (such as Peter Carruthers and Donald Davidson) still argue that language makes human experience conclusively different from even the most developed animal experience.

Surprisingly, there are no other studies that contrast the views of these three philosophers even though they are not only important views but also closely related to one another. Often, authors have compared the views of two philosophers; for example, Kant's view on animals has been dealt with by comparing it with Descartes' view (see, for example, Naragon 1990). Markus Wild (2006) has discussed Descartes' view in contrast with Montaigne's and Hume's views laying focus on the differences of the views of animal minds; just like I do here. What is missing from Wild's insightful work is a moderate view on animal minds, and Kant's view is an excellent example of that.

The contribution of this study to the discussion on animals in early modern philosophy is that I present here three possible ways to see animal minds and show how Kant defends his view against the two other views: the Cartesian mechanism and the Humean view of rational animals. This study also gives an interpretation of Kant's theory of the roles of sensibility and concepts in experience. My claim is that the role of concepts in perception is not as large as usually thought, and that Kant's criteria for conceptual thinking are quite demanding. Moreover, this study is about three ways to see the role of reason in experience. It is extremely important in this kind of comparative study to analyze carefully what exactly each philosopher refers to with the word 'reason'. I will show that their disagreements are not after all as huge as they first appear. It is stunning to realize how much the Cartesian, Kantian and Humean views

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have in common despite the apparently different starting points and metaphysical theories.

### **1.2. METHODS AND SOURCES**

The methods in this research are conceptual. The questions presented will be subjected to clarification and systematic analysis by which inconsistencies and contradictions can be detected. In this kind of study, a careful and reflective reading of the relevant classics and secondary literature is essential. The primary literature consists in the works of Descartes, Kant and Hume. When citing Descartes' works, I use the abbreviation AT to refer to *Œuvres de Descartes*, ed. Charles Adam and Paul Tannery (Paris, Vrin, 1996). In the English translations of Descartes, I follow *The Philosophical Writings of Descartes*, translated and edited by John Cottingham, Robert Stoothoff and Dugald Murdoch (New York: Cambridge University Press, 1985). I will include an abbreviated title of the cited works. A list of abbreviations is included at the beginning of this work. The full titles are given in the bibliography.

I rely on Kant's critical works as much as possible. However, a large part of his discussion of animals is to be found in his lectures of metaphysics. In using his lectures as a source, there is always the problem that they do not necessarily reflect Kant's own thinking. They are based on the Wolffian philosophy. However, Kant does also express his own opinion of the subjects in question. The lectures are fruitful in looking for his views on subjects such as the Cartesian doctrine of animals

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as machines. In citing the first Critique, I will adhere to the standard notation by referring to the pages of the A- or/and B-edition. Otherwise, Kant's works will be referred to by an abbreviated title and volume; and the page number of the Akademie-Ausgabe of his writings (abbreviated Ak.). A list of abbreviations is included at the beginning of this work. The full titles and abbreviations are given in the bibliography. Unless otherwise noted, the quotations are from the Cambridge edition.

The most important passages concerning animals in Hume's works are Chapter 1.3.16 (on the reason of animals) in the *Treatise of Human Nature* and Section IX (on the reason of animals) in the *Enquiry Concerning Human Understanding*. The page numbers of Hume's works refer to the version edited by L.A. Selby-Bigge in 1894 and revised by P.H. Niddich in 1975, to which edition I refer through the abbreviation SBN. As for the secondary literature, I have mostly chosen texts that relate to the role of animals in the philosophies of these three philosophers. I present different interpretations of the views of Descartes and Kant's view and have given credit for these interpretations to the appropriate persons.

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### **1.3. PREVIEW**

I will start by introducing the problem of animal experience, explaining why it is a problem and sketching some conventional views of how it has been approached in current and early modern philosophy. I will also define the central concepts related to the problem, such as ‘consciousness’, ‘experience’ and ‘representation’.

Next, I will discuss the Cartesian view of animals. I will present four possible interpretations of Descartes’ doctrine of animal machines and argue that the key to make sense of Descartes’ doctrine of animal machines is the distinction between sensation perception, the former being unconscious and physiological and only the latter amounting to experience. It is, however, possible to argue that also sensations entail a hint of phenomenal consciousness, but this is practically the case only in beings equipped with thinking souls. The Cartesian view is the context that Kant argued against, and sketches one possible way of explaining animal behaviour and sensibility.

The Cartesian view serves as a starting point for the discussion of animal experience in early modern philosophy. A great deal of the discussion concerning the philosophy of animal experience since Descartes has been a reaction to his view. I acknowledge that Descartes did not create his view out of nothing; it is foremost a reaction and an objection especially to the Aristotelian view based on a hierarchy of souls. However, I want to limit this study in early modern philosophy.

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In the fourth chapter, I present the constituent elements of experience in Kant's philosophy, the lower and higher mental faculties. Special attention will be paid to the role of the threefold synthesis and the capacity of the imagination in the constitution of experience. These elements will be put into practice in the fifth chapter, which focuses on animal cognitive capacities and discusses what kind of experience they allow. I will conclude the chapter by discussing the conceptual and nonconceptual interpretations of Kant while defending the nonconceptualistic reading.

The sixth chapter sketches a third alternative to approach the issue of the difference between human and animal minds. I will present Hume's argument for animal reason; and argue that even though the difference between human and animal minds is no longer seen as a difference in kind but a difference in degree, this degree remains quite considerable. In this chapter, I will also discuss the ethical implications of the view of animal experience in the philosophy of Kant and Hume.

A sharp-eyed reader might have already wondered why I present the views of these three philosophers in a wrong chronological order. Hume was a predecessor of Kant and has affected Kant's thinking—would it not make this study thematically and historically more logical if Hume's view were presented before Kant and not after him? This is exactly what should be done if the intention were to give a historical overview of how Kant's ideas are built on the ideas presented by his predecessors.

My intention is, however, to focus particularly on Kant's thinking. By giving his view on what the body does and what the mind does, Descartes gives a starting point for Kant to argue against, since Kant sees

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animals as an instance of why Descartes' system does not work. This is why I have put Descartes before Kant. Hume's role here is not as much to serve as a historical background for Kant's view—even though it also is that—as to provide an alternative way to approach animal minds. All these three philosophers have different answers to the questions of what is needed for conscious experience and what is the role of conceptual faculties.

### **1.4. THE CONCEPT OF ANIMAL AND THEORETICAL FRAME- WORK DEFINED**

Most of the central concepts will be defined in Chapter 2 but I think that it is appropriate to spell out some terms and theoretical assumptions already here. First of all, this study is historical and related to the philosophy of mind rather than to animal philosophy, if animal philosophy is understood as a critical, even a political field that aims at re-evaluating our perceptions of animals. In this study, the role of animals is primarily to explicate what makes human beings humans.

Since the focus of this study is on the views of different philosophers, it is not appropriate to use all the concepts consistently throughout the research, since that would require modifying the vocabulary of the philosophers. This particularly applies to the concepts of consciousness, thinking and reason. I will define the central terms in each relevant section as the philosopher in question uses them. Still, I first need to define some of these terms as I use them. The variety of ways using the most



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central concepts in the philosophy of animal minds makes reasonable conversation difficult. It is easy to bark up a wrong tree if it is not clear how each party understands the concepts referring to animal consciousness. I will return to this point quite frequently.

There is one concept that is even more central than these. That is the concept of animal. By animals, I mean non-human animals. I understand that animals do not form a uniform whole in contrast to humans and that humans are one species of animals among others, each species having a distinctive set of various cognitive skills. Reason is an important capacity for humans but without further premises it does not make us objectively superior to other species. There are various cognitive skills where other species defeat humans: the human sense of smell is inferior compared to that of dogs, and we can barely see in the dark. This, in turn, is no problem for cats or owls. These features simply do not matter to us and, similarly, the special human cognitive skills do not matter to those species of other animals that do not possess them.

The cognitive skills of an earthworm are far simpler than those of a bottlenose dolphin, and yet both of those species fall under the general term of “animals” in contrast to humans, even though the cognitive difference between an earthworm and a bottlenose dolphin is larger than the one between bottlenose dolphins and humans. An equally well-grounded study could in principle be made from the viewpoint of a squirrel, for example: What is the cognitive feature that makes squirrels what they are? What is it that is squirrelish in squirrels, and what is animal in them (the term ‘animal’ should be understood here as referring to other animals beyond squirrels)? The viewpoint of my study is, however, anthropocentric.

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While defining the distinctive features of animal experience and human understanding, certain value judgments tend to mix into the findings. The capacities that only humans possess are regarded as higher, more sophisticated, and in general, just *better* than the animal ones. This subjective presupposition lies already in the terms “higher” and “lower” cognitive capacities used by Kant. It is clear that for a human being it is better to be equipped with reason than to be without it. It is completely a different issue whether it is better to be a human or some other animal. The possession of understanding should not serve as a yardstick for a hierarchical order of living beings according to their ethical or whatever relevance, even though it is often taken as one. These cognitive skills do not as such justify our ruling the creation. Instead, they enable us to do science, create art, have faith in a higher being that gives purpose to our lives, propose scientific theories about nature and ethics etc. What is important is that these skills entail moral responsibility of how we use them.

The concept of consciousness will be discussed and defined in Chapter 2.1.1. along with other closely related concepts such as ‘experience’ and ‘perception’. I am not interested in physiological brain processes with which cognitive operations or phenomenal feelings might be accompanied. The physiological level alone is here not enough to qualify as cognitive. By cognitive, I do not refer to the capacity of cognition as Kant understands it, as consisting of intuition and concept, unless that exactly is the topic, and if that is the case, it will be made clear through the context. When I use the term ‘cognitive’ outside of such contexts I mean by it the processing of information in the mind.

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I often refer to rationality, or rational animals. The core feature of rationality, according to my way of using the term, is the capacity to causal and instrumental reasoning. Causal reasoning is the capacity to create an association: when a certain thing B has been perceived to follow from or to accompany a certain other thing, A, for a sufficient number of times, the presence of A will be associated with the representation of B. In instrumental reasoning the subject can actively strive for A in order to get B. The capacity of this kind of reasoning is different from the understanding of these principles. I do not want to stress the role of rationality more than this, since being rational does not necessarily entail having experience or a mind (see, for example, Khalil 2010 on the rationality of plants), which is my topic. Rational behavior can, however, be a sign of conceptual capacities.

### **1.5. RESULTS**

Descartes, Kant and Hume each have a different understanding concerning the definition of reason and the difference between animal and human minds. *Prima facie*, their views seem to be very different from each other, but when we look behind the terms they use we see that the amount of differences decrease. They all regard the independent use of reason as a unique human capacity whereas animals are always dependent on sensible stimuli.

Often, the discussion concerning Kant's philosophy of mind has concentrated on the higher cognitive capacities and the role of concepts

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in perception. My focus is instead on the role and the possibilities of sensibility. Besides the passive, receptive side of sensibility, I stress the role of the reproductive imagination in animal experience as the means of making animal experience rich, enabling complex cognitive operations without this amounting to the use of concepts, which are needed in judgments.

It is exactly this role of concepts that keeps Kant from attributing reason to animals and seeing the difference between human and animal minds as a difference in degree, as Hume does. By broadening the role of reason Hume is able to attribute it to animals but, nevertheless, some cognitive operations are possible only for humans, and it is exactly those operations that Kant sees as the proper use of reason. As Kant states in the quotation at the beginning of this chapter, the real value of reason comes from what it is used for. The highest use of reason lies in its autonomic use in moral issues. In Kant's view, this requires taking an outsider's view to one's own functions of the mind, the capacity to see oneself as an object. This is the capacity of transcendental apperception.

## *2. The problem of animal experience*

### **2. THE PROBLEM OF ANIMAL EXPERIENCE**

*He has Eyes, but knows not what he sees; knows not what to call any thing he looks on, or what Uses any thing he sees are appropriated to [...].*

Defoe 1726, 64

In the quotation above, Daniel Defoe describes the state of Peter the Wild Boy, a feral child believed to be raised in the woods without human contact. After he was found near Hamelen in Germany in 1725, he became an object of curiosity in the English court. Although Defoe's pamphlet is not a scientific but a literary work, it still serves as a suitable case-study to introduce the topic of animal experience. It addresses some central issues in the discussion concerning animal minds in early modern philosophy, such as cognitive and conceptual capacities of a non-verbal being, the state—and even existence—of the soul, the range and limits of possible experience of such a creature, and the wide-ranging effects of not having a language. What can we know of a living being that does not verbally communicate? What is the world like to him? These are exactly the same questions that we are faced with when we examine animal minds from a philosophical perspective.

In this chapter, I will first define some central concepts and explain the nature of the problem of animal experience, with special focus on how this problem was approached in early modern philosophy. Then, I will briefly present three possible solutions to the problem that continues to be the guiding thread throughout this work. One extreme view claims

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that there is no such thing as animal experience, as experience is seen as inseparably tied to language. According to another extreme, animal experience is very similar to ours. Between these two extremes, there is a variety of moderate views. Another important discussion concerning this topic is the question of whether conceptual capacities are necessary for perceptual experience, that is, the debate between conceptualism and nonconceptualism. That will be introduced briefly at the end of this chapter.

### **2.1. THE PROBLEM**

#### **2.1.1. Experience and consciousness: central concepts defined**

Before going deeper into the issue, I want to look closer at the most central concepts regarding this work, namely ‘consciousness’, ‘representation’, ‘sensation’, ‘perception’ and ‘experience’. Each philosopher I discuss here uses these terms in a slightly different manner. In discussing each view, I use these terms as each of them uses them. Here, I want to bring together their views on these concepts and define the way I use them in a general context.

By ‘consciousness’ I mean a capacity or a state of awareness. If the awareness concerns merely the state the subject is in that makes it like something to her, the consciousness is phenomenal. Phenomenal consciousness is first-order consciousness, direct awareness of something: an emotion, a sense perception, a feeling. It can be contrasted with reflective consciousness. Consciousness is reflective when it is directed to

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mental states instead of the objects of the mental states. It is higher-order consciousness. Everything phenomenally conscious is a mere stream of sensations, whereas reflective consciousness consists of thoughts. Reflective consciousness is discursive rather than experiential, even though using reflective skills is necessarily experiential: we experience also our being reflective. In the discussion concerning animal experience, the focus is on the phenomenal consciousness. It is not clear whether animals have reflective consciousness.<sup>3</sup>

‘Phenomenal consciousness’ and ‘reflective consciousness’ are rather modern concepts. Descartes, Kant and Hume did not discuss the issue of consciousness in these terms. However, the referents of these concepts are not modern inventions. What is at stake in the discussion concerning Descartes’ view of animals is whether animals have phenomenal consciousness, or whether phenomenal consciousness and reflective consciousness come as a package for being equipped with thinking souls. For Kant, sensibility enables phenomenal consciousness that is comprised of successive conscious representations. Understanding enables reflective access to these representations. In Hume’s theory that ascribes reason to animals, the degree of the reflective use of impressions (that correspond to what Kant means by

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<sup>3</sup> Besides these senses of consciousness that are relevant to my project, it should be mentioned that the senses of consciousness are not restricted to them. Some of the most important additional senses of consciousness are access consciousness, creature consciousness and state consciousness. Ned Block (1995) uses the term ‘access consciousness’ to refer to second-order consciousness which enables access to the contents of phenomenal consciousness. The term ‘creature consciousness’ refers to wakefulness or sentience. When you faint, you lose creature consciousness; and when a physician evaluates your state of consciousness, he is first looking for signs of creature consciousness. ‘State consciousness’ can be used as a synonym for phenomenal consciousness or the what-is-it-likeness of a mental state.

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representations) increases while approaching to such use of reason that is independent of impressions.

Self-consciousness is a high form of consciousness. It is consciousness of one's own subjectivity as an individual. A self-conscious subject can observe her representations as representations. General consciousness and experience is possible without self-consciousness but not vice versa. In contrast to self-consciousness, there is a simpler form of consciousness, object consciousness as awareness of objects that surround us without necessarily amounting to consciousness of one's being the subject of the representations.

I use the term 'representation' in the Kantian sense, as a general concept that encompasses all mental contents (see KrV, A 319–20/B 376). A representation can be conscious, but does not have to be (on unconscious representations, see Chapter 5.2.2.). By 'sensation' I mean a subjective, neural modification that is caused by a stimulus transmitted by sense organs to the brain for possible further processing. For Descartes, sensations can occur only at the physiological level, in which case they remain unconscious. Kant and Hume understand sensations as subjective modifications of the mind. Sentience is a capacity that unites physiology and experience, the external world and internal mind.

The term 'perception' often comes very close to 'sensation'. Kant, for example, counts sensations under perceptions in his *Stufenleiter* (KrV A 320/B 376–7), where intuitions and concepts are mentioned as objective perceptions in contrast to subjective sensations. Descartes makes a distinction between sensations and perceptions: perceptions always



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involve the mind. For Hume, perceptions are impressions whose object is present (T 1.3.2., 29). The essential characteristic of a perception is that it involves being conscious of something.

Let us look at this from a neurological point of view. In brief, the problem is, when do neural changes in the brain become experience. First, there is the objective reality, say, a green avocado. If this avocado happens to be in my visual field, it generates some changes in my eyes, optic nerves and in the primary visual cortex, V1. At this first level of visual perception, I am not conscious of the avocado—I do not yet notice that I am seeing it. What happens here is the sensation. My seeing of the avocado attains qualitative elements if it is further processed in the occipital lobe, which here is the second level. This is where it becomes a perception. The visual perception can become an object of my conscious awareness. Then, I am processing it in the frontal cortex. This is the third level of visual perception.<sup>4</sup>

It is undeniable that the first level—what happens in V1—is unconscious. It is the neural basis of all visual perceptions. The much debated question in the philosophy of consciousness asks when experience steps in: in the second level or only in the third level? Ned Block (1995) argues that the second level, the level of phenomenal consciousness, is

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<sup>4</sup> This is a very simplified model of the neurophysiology of visual perception. Its function is to illustrate what the debate concerning the relation between experience, phenomenality and consciousness is about as I will explain shortly. The neurophysiological details do not really matter relative to the topic at hand.

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experienced; and the third level is access consciousness and makes possible the use of the contents of the phenomenal level.<sup>5</sup>

Experience is constituted from conscious representations. By ‘experience’, I mean the flow of such states that are not merely physiological but also have a qualitative, mental side that make them feel like something and that might have a representational content. According to the Oxford English Dictionary (2nd edition, s.v. “experience”), the senses of the term relevant in my phrasing of the question are the following: “The actual observation of facts or events, considered as a source of knowledge”, “The fact of being consciously the subject of a state or condition, or of being consciously affected by an event. Also an instance of this; a state or condition viewed subjectively; an event by which one is affected.” By ‘animal experience’ I do not refer to the experiential knowledge or skills developed through personal experience although in some contexts I also discuss this issue.

What is relevant for experience is that it is phenomenally conscious. The essential thing in phenomenal consciousness is that it is like something. Not having any conscious representations is certainly not like anything. Phenomenal consciousness comes close to sentience. They are, however, not quite identical. Elisa Aaltola (2012, 10) points out that “[w]hereas ‘phenomenal consciousness’ refers to the capacity to experience in general, ‘sentience’ is frequently deployed specifically in the context of pain

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<sup>5</sup> The so-called global workspace model claims that the second and the third level together constitute consciousness (see, for example, Baars 1988). The higher order representationalist theories (HOR) claim that the second level consists of first order representations and is unconscious; consciousness appears in the third level as second order representations, such as thoughts or perceptions (see, for example, Lurz 2009, 9–10).

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and other basic, often physical, experiences.” If we focus on the kind of a mental state—whether it is experienced as positive or negative—we are talking about affective states (ibid.). Experience is always subjective. In the current discussion it is often described in terms of qualia, or raw feelings. They incorporate the what-is-it-likeness of particular, subjective, conscious experiences. For example, the taste of guacamole is a quale, as well as its feeling in the mouth. When I eat guacamole with you, it is possible and perhaps even probable that my qualia are different from yours. However, we can never really compare our experiences: I cannot have your experience and you cannot have mine.

Perhaps the most clear-cut example of an experience is pain. The International Association for the Study of Pain (IASP) defines pain as “[a]n unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.” The questions, whether animals feel pain and whether they suffer from pain, is of the utmost importance in animal ethics. According to the treaty established by the European Community, animals are recognized as sentient creatures. The sentience of animals is the starting point of the Protection of Animals Act in the member states of the EC. The central issue of the Act is to protect animals from unnecessary suffering and pain and to promote certain level of welfare.

Pain is often expressed in behavior: certain exclamations, grimace and a tendency to move away from the source of pain (whether possible or not) are often associated with the experience of pain. We can find these behavioral signs also in animals. From a skeptical perspective, it is not clear whether animals can feel pain, but in general it is assumed that at

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least vertebrates have this capacity due to their neural and behavioral similarities with humans.<sup>6</sup>

It is possible to argue against animal sentience that even though animals sometimes look like as though they were in pain, in fact they do not experience pain. In such a case, we are talking about mere nociception, which is a physiological reaction to pain without the feeling of pain. Nociception is sufficient to trigger the response. It happens at the instinctual, non-conscious level. Pain is a subjective, phenomenal experience; nociception a physiological reaction.

If we assume, as it is reasonable, that (most) animals can feel pain, we can continue by asking, what are the other possible objects of animal experience. What kind of information processing are they capable of? What kinds of emotions, moods or feelings can they have? And what about more complex experiences such as the feelings of unfairness, shame and envy that are related to social interaction?

Along with phenomenality, the *likeness* of an experience, another issue that is constitutive of experience is the *aboutness* of the experience. Experience as a mere mixture of sensations remains meaningless and confused. The sensations are in themselves insufficient for determining intentional action. If my experience of an avocado were limited to the qualia of the visual perception, it would never come to my mind to use the avocado in any way. I would have a sensation only of a spatial, dark

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<sup>6</sup> For further discussion, see Dawkins 1998, 308; Singer 1975, 11–13; Webster 1997, 91; on the argument against the capacity of fish to feel pain, see Rose 2002; on the methods for studying pain in animals, see Webster 1997, 91; on the capacity of cephalopods and decapod crustaceans to feel pain, see Minett 2013, 40–1.

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green area. The qualia are there but, as such, my experience does not generate any action. Access consciousness makes it possible to use the information provided by sense perceptions. If I can identify the avocado as an object (not necessarily as an avocado), this kind of consciousness of the content of the experience makes it possible for me to use my experience. I can now, for example, try to find out whether the avocado is edible and then enjoy the qualia related to its taste. Now the question arises, whether this differentiation requires conceptual capacities or whether it is possible without them.

How is the problem of animal experience different from that of animal consciousness? In short, the answer is: not much. All (relevant) experience is conscious. The reason why I have chosen to talk about animal experience and not about animal consciousness is in the kinds of things on which I want to concentrate. ‘Consciousness’ refers to a mental capacity or state, ‘experience’ to the mental content made possible by it. Thus, the focus will be on the quality and content of animal minds rather than on their mental capacities; these however, will also be carefully examined. To know what the capacities are is not as interesting as to know what they make possible, that is, experience. Another reason to talk about experience and not consciousness is that in early modern philosophy, consciousness was closely connected with rational reflection as a counterpart of sentience whereas today we are tempted to regard sentience as belonging to consciousness. (Morris 2000, 402–3.)

The core of the problem of animal experience lies in the representational content of animal representations. Are animals conscious of what they represent? Some authors, such as Jamiesson (2009), address this problem by discussing animal thoughts. By ‘thinking’, he refers merely to

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mental content, which is a proper use of the term ‘thinking’ in everyday language. The reason why I do not use the term ‘thought’ here is the technical use of the term in early modern philosophy as referring to a cognitively demanding act of the mind, which is often regarded as originating from a separate faculty that many authors want to exclude from animals. (See Chapter 3.4.2. on Donald Davidson’s argument for language as a criterion for thinking and on Norman Malcolm’s argument for two senses of thinking, as a propositional act on the one hand and the “thinking” without propositional content on the other.)

### **2.1.2. Ontological and epistemological issues**

Simply put, the problem of animal experience can be expressed in a direct question that can be answered with a simple ‘yes’ or ‘no’: Do animals have experience? If the answer is negative, we are interested to hear the reasons why. If the answer is affirmative, we are tempted to ask another question: What is animal experience like? Is it similar to ours? If not, how is it different? Very soon we realize that these questions are not that easy to answer. We are faced with methodological difficulties: Is there a way to reach even a part of the animal point of view? How can we reach it, what aspects of it can we reach, and where are the limits of our possible knowledge concerning it?

The problem of animal experience is in fact a version of the skeptical problem of other minds. Instead of asking whether other people have minds, the question is directed to animals. As such, it is no longer

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merely a theoretical problem that haunts mainly philosophers and other people with a distorted sense of reality; instead, it is a reasonable question whose answer can be further applied to discussions in animal ethics concerning the justification of animal use. Another issue in the philosophy of mind where animals bring the discussion from the theoretical spheres to reality is the discussion of zombies. If we can find criteria, according to which we are justified in believing that other humans are not zombies but are sentient, rational beings, then we have little reason to deny this conclusion in the case in which we find the same criteria fulfilled in animals.

It feels natural to regard animals as beings that undergo experiences. This intuition is based on physiological and behavioral similarities between humans and animals. We can see that animals have sense organs and (neuro)physiology similar to ours. It would make sense to assume that they had the same function in animals as they do in us. However, this inference is logically not valid. The same organ can have different functions in different species (for example, not all animals with wings are able to fly); or different organs can have the same function (for example, some birds are known to be intelligent even though they do not have a neocortex that in humans is associated with intelligence).<sup>7</sup>

Animal behavior is similar to ours: they seem to have preferences, their behavior appears goal-directed; they seem to learn. Their action often seems rational instead of irrational or mechanical. It is, however, also possible to give a mechanical explanation for animal behavior, one

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<sup>7</sup> For a more detailed discussion concerning analogical reasoning, see Aaltola 2012, 10–11.

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that does not provide conscious experience. Which explanation, then, is correct? A good principle of explanations is to rely on the simplest explanation possible. Comparative psychology relies on a version of this principle known as Morgan's canon. According to this, we need not explain animal behavior through a higher mental capacity if it is possible to explain it through a lower one.

However, it is not always easy to decide which explanation is the simplest one. If the chosen explanation relies on instincts, we may have to assume a very complex system of instincts. Is this explanation, after all, simpler than the one based on conscious reflection? Moreover, it should be kept in mind that when we are looking for signs of sentience in animal behavior, we might need profound understanding of animal behavior. Animal behavior is not similar to human behavior in every respect. Animals may, for example, express pain differently than humans. (Aaltola 2012, 11–13.)

The investigation of animal experience is easy to question by appealing to the methodological difficulties of this field of study. We cannot even know for certain whether animals are conscious beings, much less attain the subjective nature of their experience. Thomas Nagel addressed this issue in his famous article, "What is it Like to Be a Bat?" (1974), where he argued that we can know that being a bat certainly is like *something* even though it is impossible to give an objective account from the third-person-perspective on what it is like.

Peter Carruthers (1999, 2000) argues that there is not anything it is like to be an animal: being an animal does not have any particular feel.



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Especially most if not all representatives of ethically and politically motivated animal philosophy<sup>8</sup> take it for granted that animal experience is—in relevant respects—similar to human experience, or they do not consider the cognitive capacities of animals relevant in animal ethics.<sup>9</sup> Colin Allen (2004, 620–1) claims that these extreme views—which, surprisingly, are the most common ones in the discussion concerning animal experience—are not fruitful approaches to the problem of animal experience, because they both presuppose the uniformity of non-human species. What, if anything, is similar in the experience of an earthworm and chimpanzee?

According to recent research in cognitive ethology (see for example Griffin 2001, 12–13; Dawkins 1998b, 177), the most promising signs of animal consciousness are flexible behavior, communication and neuropsychological similarities with humans (this line of thought can also be found in Descartes' and Kant's writings). These features—apart, perhaps, from the last one—provide a subjective point-of-view that matters to the subject and affects its behavior. Keeping the restrictions of our capacity of knowledge in mind, we can proceed by asking that even if we cannot obtain the whole, absolute truth concerning animal experience, what we can fairly reliably know about it. On this basis, we can further consider the role of our view of animal experience in ethical and practical decisions concerning the treatment of animals, such as<sup>10</sup> the question of when analgesics should be given.

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<sup>8</sup> For instance, Cora Diamond 1978 and Barbara Smuts 2001.

<sup>9</sup> For instance, Adams 1990, Donovan, 1990; Francione 2010 and Nussbaum 2006.

<sup>10</sup> See for example Decartes' letter to the Marquess of Newcastle, 23 November 1646 (AT IV, 576).

## ***2. The problem of animal experience***

### **2.1.3. The problem of animal experience in early modern philosophy**

The problem of animal experience was a topic of lively discussion in early modern philosophy. One motivation for it was theological, and it was related to faculty psychology. Animals seem to act in many respects as humans do. Many human actions are based on thinking, that is, conscious representations of the world, and subjective states such as emotions and wants. Is this the case also with animals? Further, it was argued that the thinking substance—soul—was simple, not a composite and, as such, it cannot be naturally destroyed by decomposition but it must be immortal.

In early modern times, the idea of immortal animal souls was regarded as improbable if not even impossible. Therefore, in the extreme version of the argument (presented most famously by Descartes), animals do not have souls and thus cannot be capable of thinking. In his letter to the Marquess of Newcastle on May 4 1647 (AT IV:576), Descartes writes that

if animals thought like we do, they would have an immortal soul like we do, and it is not probable, because there is no reason to believe this in the case of some animals without believing it of all, and because many, such as oysters, fungi etc. are too imperfect to this being plausible.<sup>11</sup>

Faculty psychology is an issue that hardly any early modern philosopher leaves untouched. Its aim is to classify the faculties of the human mind

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<sup>11</sup> My translation.

## ***2. The problem of animal experience***

and to define their tasks. In such an enterprise, the interest easily turns to comparative psychology: how are animal mental faculties different from human mental faculties? Are they different only in degree, so that animals are equipped with the same faculties but with a lesser amount, or perhaps in kind, so that humans have all the faculties that animals have plus some extra faculty unattainable for animals?

### **2.2. POSSIBLE SOLUTIONS**

In this chapter, I present possible solutions to the problem of animal experience by introducing three possible ways to see the difference between human and animal minds. This serves as a theoretical framework for approaching this problem and illuminates the ways it has been approached also in early modern philosophy. Each philosopher I will discuss here represents a different approach, and this chapter helps to see what is special in their views and also introduces the relevant terminology. The focus is in early modern philosophy, but I will look at this subject also from the point of view of contemporary philosophy.

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The views of animal experience can be divided in three<sup>12</sup> groups: 1. eliminativistic view, 2. assimilationistic view and 3. moderate or differentialistic view. According to the eliminativistic view, there is no such thing as animal experience. According to the assimilationistic view, animal experience is essentially similar to human experience and the differences are only differences in degree. The moderate view includes several viewpoints between these two extreme views. Common to all the views that fall under the moderate view is that the cognitive difference between humans and animals is seen as a difference in kind. These views can thus also be called differentialistic. Also the eliminativistic view is differentialistic but in a quite radical way: in eliminativism, the difference is substantial. It does not concern even the kind of the experience but the whole existence of experience.

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<sup>12</sup> Jamiesson's (2009, pp. 19–34) corresponding division—based mainly on the views in contemporary philosophy—has four groups: eliminativism, wet eliminativism, the brute content view and interpretivism. As eliminativists (such as Davidson) deny all kinds of animal thinking, wet eliminativists (such as Stich) accept that there is some kind of belief-like representational activity going on in animals. According to the brute content view (such as Allen), the content of animal representation is, at least in principle, identifiable; and according to interpretivism (such as Dennett), our attributions of thoughts to animals are, in general, sufficiently correct.

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### **2.2.1. Eliminativistic view**

The eliminativistic view claims that animals have no experience; any talk about animal experience is therefore nonsense. The eliminativists accept only mechanistic or physiological explanations for animal behavior. In early modern philosophy, Descartes is often seen as the most famous representative of this view. The question of whether there is room for animal experience in Descartes' theory is a topic of lively discussion and not everybody agrees that phenomenal sentience of animals is incompatible with it. I will discuss Descartes' argument and its various interpretations in detail in Chapter Three. In this chapter, the standard interpretation of the Cartesian view serves as an example of the eliminativistic view.

According to Descartes' substance dualism, the world consists of a material and an immaterial substance. Each substance is autonomic, that is, subjected to certain kind of laws. Natural laws govern the material substance whereas immaterial, thinking substances are capable of autonomic action. In humans, these substances interact: we can decide how we move our mechanically functioning body. Animals are merely material beings; there is no immaterial substance present in them, and since thinking, in Descartes' view, is the attribute of the immaterial substance, animals do not think. According to the eliminativistic standard interpretation of Descartes' view of animals, animals are machines devoid of everything mental: they have no feelings whatsoever. Being an animal is not like anything. All animal action can be explained through mechanistic physiology. Animals are seen as machines, and sensorial inputs

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together with the pre-programmed physiological responses determine all their behavior without this amounting to any kind of experience.

In early modern times, Descartes' view was criticized from a physico-theological point of view (for example G.F. Meier 1749, § 69–70, 117–19; and H.S. Reimarus 1773, § 109, 212–15). According to physico-theology, everything in nature is perfect and purposeful and, as such, nature is seen as a living proof of the existence of God. Mechanical animals would be useless parts of nature, incapable of enjoying the Creation, and therefore the Cartesian doctrine of animals must be mistaken. Another, a more recent problem for this view is the complexity of the explanations of animal behavior, as already discussed above. It can be claimed that the eliminativistic view multiplies the mechanistic and instinctual entities beyond necessity by denying conscious experience. Descartes acknowledges this line of argument and answers it by appealing to the intelligent design of the mechanics of animals, mechanics that is far beyond our skills.

In contemporary philosophy, Carruthers (2000) has argued that animals probably do not have phenomenal consciousness. Even though the world is somehow presented to them, they do not really experience it anyhow. Animal experience can perhaps be compared with the experience of sleepwalking. Carruthers argues that we are tempted to ascribe conscious mental states to animals. When we are thinking, for example, what it might be like to be a squirrel jumping from one tree to another, we are in fact projecting our own conscious thoughts on to the squirrel and simulating what we would be experiencing if we happened to have access to his mind. According to Carruthers, the squirrel's experience is,

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however, in fact probably unconscious and not like anything. This does not rule out sense perceptions, only their phenomenality. (Carruthers 2000, 198–200.)

What about animal pain, then? Do they not feel pain? According to Carruthers (2000, 200–1), they perceive pain as a phenomenally conscious feeling, but can still be in the state of pain, which is a first-order perceptual state and which does not imply this state having any kind of feeling in the same sense as it is possible to be able to see the color, red, without this being like anything. Carruthers' claim is that phenomenal consciousness is not a necessary part of the experience of pain. Phenomenal consciousness requires higher order representations which make perceptual relations to the contents of the representations, in this case, pain, possible. “[T]o feel pain is to have a first-order analog representation of a certain property (*pain*<sup>a</sup>) distributed through a certain region of one's body; and the experience of feeling pain may or may not have any subjective *feel* or ‘what-is-it-likeness’, either.” (Carruthers 2000, 200–1.) For the state to have a feeling one needs to be able to recognize it (*ibid.*, 14).

The eliminativistic view is based on the idea that phenomenal sentience is not necessary to explain animal behavior; and since it is not necessary, it is reasonable to assume that it does not exist. This view relies heavily on the fact that animals do not have a language. Language is seen as a sign of second-order consciousness that is seen as a necessary condition for the awareness of perceptions: Without the ability to express what you feel you do not really feel anything. In this study, I want to stress that feeling and making a judgment concerning the feeling are two dif-

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ferent things, and the latter capacity adds to the experience exactly the conceptual judgment, not consciousness.

### **2.2.2. Assimilationistic view**

The assimilationistic view is the opposite view of eliminativism. According to assimilationism, the difference between animal and human cognitive capacities is only a difference in degree; or, as Rescorla (2009, 52) puts it, “linguistic and non-linguistic cognition are fundamentally the same.” In early modern philosophy, Hume, Locke and Meier can be counted as assimilationists. This seems evident when we look at Hume’s bold claim in *Treatise* (1.3.16, 173) that it is an evident truth that animals have reason as well as humans.

The approach of Hume and Meier to animals is more empirical than that of Descartes and Kant in that they both stress the importance of observing animal behavior. By comparing our observations to our own behavior, we can make analogical inferences concerning the reasons for animal behavior. We clearly see that animal and human behavior are essentially similar in that we both aim for what we find pleasant and avoid what is unpleasant. We know that in doing so, we are guided by conscious representations. Thus, we may conclude that animals also have conscious representations; otherwise we would have to use different standards in explaining the same thing in different species.



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The assimilationists proceed bottom up, from the most basic cognitive traits (that is, sensibility) that humans and animals share with higher ones (that is, conceptual and abstract thinking) where the cognitive difference is to be found. Animals do have conscious experience and they learn from experience. The empiricist assimilationists (such as Locke and Hume) regard empirical learning as an important proof of animal reason. Learning provides memory and a primitive understanding of causality.

A problem for assimilationism is the difficulty of retaining the difference between humans and animals as a difference in degree. Even if we talk of degrees, there is always a line that cannot be crossed. If this line is between reason that is blended with sensibility and reason free from sensibility, as David Hume sees the difference between humans and animals (I will take a closer look in Hume's argument in Chapter 6), this seems like a difference in kind. One might also accuse assimilationists of assuming too much from animal cognition (just as the eliminativists were faced with the opposite problem, of assuming too little). This view takes seriously our tendency to attribute beliefs to animals and aims to justify it rather than refute it through theoretical reasoning that requires no any real interaction with animals.

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### **2.2.3. Moderate view**

According to the moderate view, animals are conscious beings and it makes perfect sense to talk about animal experience, but animal experience is essentially different from human experience in that animals only have sensible (or lower) capacities<sup>13</sup> and not discursive (or higher) ones as humans do. Lower cognitive capacities are responsible for sentience, whereas higher cognitive capacities make thinking and self-consciousness possible.

Understanding and reason are higher capacities. Language, as a product of higher cognitive capacities, is considered a central factor that differentiates between humans and animals. As Rescorla (2009, 52) writes, the idea is that “non-linguistic creatures display cognitive activity of a fundamentally different kind than human thought.” In contrast to the assimilationistic view, which regards the difference between humans and animals as gradual, the moderate view regards this difference as a difference in kind. Thus, it can also be called differentialism. In early modern philosophy, the most famous advocates of this view were Leibniz and Kant. Here, I will shortly discuss Kant’s view, on which I will concentrate in more detail in Chapter 5.

Kant’s view of animals adds experience and mentality to the eliminativistic interpretation of the Cartesian view. According to Kant, animals are beings that have sensible representations. They cannot, however, conceptualize these representations, since they do not have the required faculties, understanding and reason. Furthermore, animals are not

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<sup>13</sup> On the division of the cognitive capacities in the lower and higher ones, see Chapter 4.

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conscious of themselves. All this keeps animal action mechanical, that is, subject to natural and physiological laws and necessities. Higher cognitive capacities entail freedom and moral responsibility. What this view adds to eliminativism is the mind: animals do have mental representation and there is something it is like to be an animal, but this *something* is very rudimentary in cognitive respect (the intuitive content can, however, sometimes be richer and more detailed than what is possible for humans; comparing, for example, the sense of smell in dogs and in us).

According to this view, animal experience is a non-conceptual flow of sense perceptions, moods and emotions. Unlike humans, animals cannot perceive something *as* something. Due to this non-conceptuality, it is difficult if not impossible to know what exactly animals are thinking (thinking should be read here as referring to mental content), since we would have to use concepts to describe the non-conceptual representations, and this is why some philosophers are tempted to say that according to this view, animals do not think. Even though animals can make distinctions at the level of perception, it does not follow that they can make conceptual distinctions.

According to Wild (2006, 8), the interaction between mental faculties in humans can be a problem for differentialism. If higher cognitive faculties are completely different in nature from the lower ones, how can they interact? Schemata are Kant's solution to this problem. Another problem for differentialism is—just like in eliminativism and assimilationism—explaining animal behavior. To compensate for the missing higher faculties, the differentialist may have to assume very complex instincts, and once again it can be asked whether this is the simplest way.

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### **2.3. THE PROBLEM OF ANIMAL EXPERIENCE IN CONTEMPORARY PHILOSOPHY**

Before moving on, let us take a brief look at the problem of animal experience from the viewpoint of contemporary philosophy to see how this discussion has developed since Kant. Contemporary philosophers are no longer concerned with the question of animal souls. Instead, the focus is on the question of the relation between language, experience and thinking. I introduce two contemporary problems here. The first is theoretical and concerns the structure of animal representations; the second is more practical in that it depends heavily on studies in the field of cognitive ethology and concerns the cognitive capacities of animals: can they have knowledge concerning minds? If they can, what does it tell us about their cognitive capacities?

In contemporary animal philosophy, one important discussion concerns the language of animal thought. According to Elisabeth Camp (2009), there are three ways to understand the structure of (animal) representations: iconic, propositional and map-like. Iconic representations represent the environment as an image with no formal structure. Propositional representations can be combined very flexibly and, in map-like representations, the combinatorial principle is robust and restricts the possible representations and the possible relations of the representations (Camp 2009, 121–2). Camp (2009, 125) suggests that the language of animal thought is at best map- or diagram-like. As we will see, the same problem also troubled early modern philosophers.

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In contemporary animal philosophy and comparative psychology, there is discussion about theory of mind (for example, Povinelli and Vonk 2006, Proust 2006, Tomasello and Call 2006) and metacognition (for example, Call 2006, Proust 2006, Shettleworth and Sutton 2006) in animals. The core question of this issue is whether animals know that other animals also have minds and their own viewpoint of the world. In the discussion concerning metacognition, the focus is on the ability to understand one's own mental states *as* mental states: do animals know that they know? These contemporary discussions are fundamentally a continuation of the early modern discussions concerning the mental faculties of animals. The role of philosophy is to assess the criteria for the correct use of the relevant concepts: How is using concepts to be differentiated from proceeding from mere sense perceptions? When are we justified to ascribe higher cognitive capacities to animals?

In the contemporary, politically-orientated animal philosophy, the skepticism concerning animal experience is seen as ungrounded sophistry; we intuitively know that animals are intelligent beings that have feelings. It is argued that this should be our starting point in dealing with the questions of animal ethics (see, for example, Dawkins 1985, 27–8; on a detailed exposition of the central doctrines of animal philosophy, see Wild 2008 19–24). The issue of animal experience has still not been completely solved. Cognitive ethology constantly generates new knowledge concerning the cognitive abilities of animals. The job of the philosopher is to define the sufficient and necessary conditions for the relevant concepts, such as the concept of self-consciousness or reason, to ensure that they are appropriately employed.

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### **2.4. CONCEPTUALISM AND NONCONCEPTUALISM**

The problem of animal experience lies at the heart of the debate between conceptualism and nonconceptualism concerning mental contents: are concepts a necessary condition for conscious representational mental content, that is, conscious experience? What is the relation between conceptual capacities and perception? In particular, what is the role of perception in conscious experience? I will now briefly introduce the conceptualistic and nonconceptualistic views, since answers to these questions form the foundation to our perceptions concerning the issue of animal minds. In Chapter Five, these themes will be applied to interpreting Kant's perceptions concerning the role of sensibility in the constitution of experience. Kant sees animals as beings that are capable of sensible perception regardless of their incapacity of using concepts, and I argue that this is a strong argument for the nonconceptualistic reading of Kant.

The core claim of conceptualism<sup>14</sup> is that conceptual capacities determine all experience; there can be no perceptual discriminations without the possibility of conceptually referring to their content, if only through a demonstrative concept (see Hanna 2008, 46). Our original encounter with the world is already tinged with categorization of perceptions. There is no such thing as pure perception that somehow precedes judgment independently from concepts or, if there is, it cannot have any kind of representational content.

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<sup>14</sup> For example McDowell (1994) and Brewer (1999) argue that the role of perceptions lies in providing reasons for beliefs and that conceptual contents are necessary for this.

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This implies that animals—assuming that they are non-rational, lacking conceptual capacities—do not have mental contents (see Hanna 2008, 42; and 2005, 250), meaning that there is no such thing as animal experience.

Colin McLear (2011, 3–4) distinguishes between two kinds of conceptualism which he calls sensory solipsism and sensory nihilism concerning non-discursive consciousness. Sensory solipsism allows subjective, phenomenal consciousness experience of non-discursive minds but only the access to objective world. Sensory nihilism allows interaction with the environment without it being anything like the subject of which Descartes' mechanistic view is a good example. McLear argues for non-conceptual cognition, that is, the possibility of objective consciousness without conceptual capacities. Hanna (2008, 59) argues for nonconceptual contents by claiming that direct sensimotor subjectivity is possible without meta-representational self-consciousness.

John McDowell (1996, 114, 119) claims that animals with no conceptual capacities lack self-consciousness, experience of objective reality, external experiences and inner experiences. He claims that the idea that human experience differs from animal experience only in that humans can conceptualize what they perceive rests on the so-called myth of the given (originally presented by Sellars 1956/2000), the idea that there is a fundamental structure of the world that can be nonconceptually and directly perceived (McDowell 1996, 63–5; 114), and, furthermore, the perceptions of the same object are essentially similar, independent even from the species of the subject (Brewer 1999, 177).

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According to the nonconceptualistic standpoint,<sup>15</sup> the mental content provided by perception is nonconceptual, and thus concepts are not needed for representing the world. In this view, it is easy to account for the experience of non-linguistic creatures such as human infants and non-human animals. Non-conceptual thinking is “domain-specific and modular” whereas conceptual thinking is “domain-general, systematic and productive” (Bermúdez and Cahen 2008/2011).

There are at least three strong motivations for adhering to the nonconceptualistic view. The most important argument is that non-linguistic creatures such as animals and human infants clearly seem to have perceptions without the ability to conceptualize them. Closely related to this, it would be difficult to account for the fact that it is possible that human infants with dormant conceptual capacities learn to conceptualize the world around them, without this being a giant leap in the way they experience it (see also Hanna 2008, 43). Lastly, it sometimes happens that one experiences something that one would like to share with others but just cannot find the exact concepts to describe one’s experience.

Not having the concept does not imply not having the experience. The difference between animal and human minds can be approached from two starting points. The first option is the top-down approach, which proceeds from the conceptual capacities emphasizing the differences between the two kinds of minds whereas the bottom-up approach proceeds from the basic, shared features and sees them as the relevant foundation for conceptual capacities.

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<sup>15</sup> This view was originally spelled out by Evans 1982 and it was further developed by Peacocke (see, for example, 1992). Also McLearn 2011, Laiho 2012, Hanna 2008 and Hurley 2006 argue for the nonconceptualist stance.



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The top-down approach supports the conceptualistic account whereas the bottom-up approach is compatible with nonconceptualism (see also Hanna 2008, 43).

I have not yet encountered any convincing reply from the part of the conceptualists to the issue of explaining animal perceptions. They have two options: they must either accept that at least some animals have concepts, or they must deny the possibility of animal experience. Still, the conceptualist has to assume a huge leap between a conceptual intellect and a nonconceptual intellect, and the fact that most human infants seem to learn conceptual thinking gradually rather than with a sudden leap seems to contradict that view. Brewer (1999, 178–9) acknowledges this problem but argues that this alone does not imply that conceptualism is mistaken; instead, he claims, that there is an equal problem for the nonconceptualist concerning the interaction between perceptions and concepts which are seen as completely different kinds of things. Brewer does not, however, meet this challenge and argue for conceptualism here. I claim that he is making things more complicated than they are, mixing the roles of perception and concepts (see Laiho 2012, 228).

McDowell (1994) has faced this challenge by developing an account of “perceptual sensitivity to features of our environment” instead of nonconceptual content as the shared feature between rational and non-rational beings; but what is shared is more of a tendency, not a content or a form. For humans, this sensitivity is essentially conceptual. In this way, McDowell (1994, 116) argues, the features of the environment can be “problems or opportunities” for animals, even though they do not perceive them as such. Defined this way, conceptualism is compatible

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with object consciousness of animals without this having to amount to phenomenal consciousness. Animals can act—or, rather, react—in the world, but they are completely determined through their physiological structure and environment. Again, this makes the leap to conceptual consciousness enormous. Through concepts, one would not only be credited with the capacity to judge but also the contents on which to judge, that is, a complete world. The form and content would come in the same package.

I claim that our primary encounter with the world is not conceptual but phenomenal. Otherwise it would be impossible to account for experiences that are hard to put into words. We know what we want to describe, we recognize that the concepts that come to our mind come close but do not capture the exact experience we have in mind. Still, that does not make it any less of a conscious experience. Conceptualization helps to reconnect with the experience by providing a label for the contents of the essential characteristic marks of its object. The conceptualists would claim that since it is possible to start referring to this content by a concept, it already is of a conceptual character in the demonstrative sense. It is “that” perception I mean, and not any other simultaneous perception. To be able to individuate it in the first place is already conceptual. But I claim that here the conceptualists broaden the concept of a concept too far. If I am unable even to articulate the necessary components of the given experience, but can still perceive them, I do not see how this is supposed to be conceptual.

Finally, the key issue before going deeper into this debate is to define clearly what exactly it means to have a concept (see also Bermúdez and

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Cahen 2011). Is the capacity for perceptual, singular discernment already conceptual, or do concepts require more generality? Are concepts necessarily linguistic? Where exactly is the border between meaningful perceptions and concepts? Does demonstrative pointing count as using a concept? Similarly, as in explaining animal behavior, it is important to find the right balance between how much and how complicated instinctual responses have to be assumed and where is the right place for rational reflection to step in; it is important to find the balance between the possibilities of perceptual experience and where conceptualization begins.

### **2.5. CONCLUSION**

In this chapter, I have defined the most central concepts concerning the problem of animal experience and highlighted its ontological and epistemological aspects. The epistemological approach should always be kept in mind to remind us that the assumptions concerning other minds are only assumptions, not hard facts. This problem has often been approached from the viewpoint of how animal minds are different from human minds. In this chapter, I have introduced three possible ways to see this difference. These three ways guide our way through this whole study, since each philosopher I discuss here represents a different approach. I have also examined how this problem still is alive in contemporary discussion.

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Hardly any early modern philosopher concerned with animal minds disagrees that it is the capacity for abstract conceptual thinking that makes humans different in relation to animals. Whether this difference is seen as gradual or qualitative, it nevertheless entails significant implications on the whole of life: the way of living and experiencing. Reason entails the capacity to understand what is meant by morality and freedom of choice. Let us go back to Peter the Wild Boy for a while. Defoe (1726, 24) describes him as “a Ship without a Rudder, nor steer’d or managed, or directed by any Pilot; no, hardly by that faithful Pilot called Sense, the Guide of Beasts.” This description is directly applicable to animals, even according to the assimilationistic view.

My topic in this study is metaphysical—what kind of experience mere sensibility, the faculty Kant ascribes to animals, makes possible. Even though the metaphysical question of animal minds and the ethical question of the proper treatment of animals are distinct, ethics and metaphysics are not completely isolated from another, and I want to shortly discuss the contribution of the former to the latter. Our views concerning what makes us different from animals can be and have been used in the discussion concerning our moral duties to animals.

It is important to notice that loose criteria for treating animals do not follow directly from eliminativism; similarly, assimilationism does not necessarily entail high moral demands concerning animals, even though it is easy to assume such connections between the moral standing of animals and our conception of animals. The scope and depth of the possible experience is not the sole criterion for ascribing moral value to animals. I will shortly discuss Kant’s and Hume’s views of animal ethics in relation to their metaphysics of animal minds.

### *3. Descartes on animal experience*

#### **3. DESCARTES ON ANIMAL EXPERIENCE**

*Toys can't see even black.*

Kerttu, five years.

In this chapter, I will discuss the Cartesian view of animals as mechanically functioning material beings that have no minds. To understand Kant's view of animal experience profoundly, it has to be set in a historical context. It is a counterargument to Descartes' mechanistic view of animals. This chapter sketches a starting point for Kant to argue against. Simply put, Descartes' doctrine is that animals are material beings that do not think. The common understanding of this view is that it justifies meaningless torture of animals. If animals do not think or even feel, it is unnecessary to treat them humanely (see for example Rogers 1997, 15; Dombrowski 2013, 227; Rollin 2013, 256).

The short description of Descartes' view of animals does not, however, say much to explain animal behavior—not to mention animal sensations. Descartes had profound reasons for classifying animals as machines, and before proceeding to Kant's thoughts on the subject, it should be made clear what he meant by this and why he thought like this. When we have a good understanding of Descartes' way of explaining animal behavior and the implications of his view on the possibility of animal experience, it is easier to understand how Kant's view works as a counterargument to it.

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In the above quotation, my daughter aptly characterizes the state of non-experience by using toys as an example. What about animal experience in the Cartesian view, then? Is it like the toys with no experience, not even the experience of complete blackness? Or is there something more in the experience of animals, perhaps some kind of experiential blackness, with no further qualifications? Or is it, perhaps, very rich in the level of sentience, without distortions caused by preconceptions and anticipations of the analyzing and selective mind?

According to Descartes' substance dualism, the world is composed of two kinds of substances, unextended spirits and extended bodies. The chief difference between humans and animals is their ontological ingredients: animals are composed of mere matter, whereas humans also have a thinking soul. The question about animal experience is particularly tricky in this view. Descartes counts various cognitive acts as thinking which, by definition, is excluded from animals. The case is not as clear, however, for sentience: does all sentience count as a species of thinking, thereby being excluded from animals; or is there room for experience at the physiological level?

In the following paragraphs, I will first concentrate on the foundations of Descartes' substance dualism; especially on the question of why he thought that humans must have souls whereas animals cannot. Then, I will explain his doctrine of animal machines and discuss the problem of whether this doctrine allows of animal experience. In Section Three, I will look closer at Descartes' notions of sensation and thinking. I will classify the interpretations of animal sensations into four groups according to what level of experience is granted to non-thinking creatures.

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Sensations cannot be discussed without any reference to thinking, but the focus in the second part of this chapter is on the question of what the core element of thoughts is, that is, when sensations count as thinking. To conclude, I ask how Descartes justifies all this, given that it is a common practice to attribute thoughts to animals. This section will deal mostly with thinking and language.

#### **3.1. THE FOUNDATIONS OF DUALISM**

Briefly, the difference between humans and animals in Descartes' view is that humans have a thinking soul and animals do not. Before focusing on Descartes' arguments for his doctrine of animal machines, let us first concentrate on the questions of why he thought that humans must have an immaterial soul, and why he could not accept that animals have souls. The answer for these questions is to be found in the *Meditations*.

In the Second Meditation, Descartes realizes that there is one thing that is impossible for him to doubt: that he thinks. "But what then am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions." (CSM II:19, AT VII:28.) Here, Descartes defines things he just knows for certain every time he experiences them, and they all fall under the category of thinking. He cannot be as certain of the existence of his body (which he, however, finally proves in the Sixth Meditation), to which, however, he notices himself being in a close relation.

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Since the degree of certainty concerning these two substances is different and since they can be grasped independently of each other, they are distinct substances and the soul must be immaterial:

[M]y essence consists solely in the fact that I am a thinking thing. It is true that I may have (or, to anticipate, that I certainly have) a body which is very closely joined to me. But nevertheless, on the one hand I have a clear and distinct idea of myself, in so far as I am simply a thinking, non-extended thing; and on the other hand I have a distinct idea of body, in so far as this is simply an extended, non-thinking thing. And accordingly, it is certain that I am really distinct from my body, and can exist without it.” (CSM II:54, AT VII:78).

Here, Descartes takes the non-extendedness—which entails simplicity—of the soul as given. He argues for it later (CSM II:59, AT VII:86). The argument that material beings are divisible whereas the immaterial soul is indivisible is, according to him, sufficient to prove that mind and body are different and independent substances. If a part of the body is removed the soul does not diminish. Different acts of the soul are not its parts; there is only one mind that does all those things. (Ibid.)

The possibility of animal thinking is an issue that often comes up in the objections to Descartes’ *Meditations* (see, for instance, CSM II:144, AT VII: 204–5; CSM II:189; AT VII: 270–1; CSM II:279, AT VII:414). Many authors, such as the early modern philosophers, G.F. Meier and H.S. Reimarus and the contemporary philosopher, Stephen Gaukroger, suggest that the simplest—or the most plausible—explanation for animal behavior is that they have thinking souls, since they seem to be



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capable of information processing in the sense that they interpret their stimuli.

One reason for refraining from attributing souls to animals is the principle of parsimony. There are two principles of action, spiritual and material. Descartes is convinced that the latter can explain all actions of animals. (CSM II:161–2, AT VII: 231–2.) His arguments for this point will be examined in the fourth section of this chapter (epistemological issues). Descartes (CSM II:248, AT VII: 358) also points out that we can study animal thinking only empirically; we cannot look inside their heads to see what they think or feel. We cannot prove with absolute certainty that animals think or that they do not, since we see animals only from the outside. Descartes' point is that we do not need thoughts to explain animal behavior.

It is important to keep in mind that Descartes' focus is not in arguing against animal souls from the theological point of view where the idea of immortal animal souls is regarded as absurd. Descartes' argument also includes this point (see for example letter to the Marquess of Newcastle, 23 November 1646, AT IV, 576), but it is not the reason why he refrained from attributing soul and thoughts to animals, which would make his argument *ad hoc*. This argument runs as follows:

1. Animal behavior can be explained either by attributing thoughts to animals or mechanically without attributing thoughts.
2. The ability to think is a necessary and a sufficient condition for having a soul.
3. The idea of immortal animal souls is absurd.

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4. Therefore, animals do not think and their behavior should be explained mechanically.

Here, the conclusion does not follow since absurdity does not necessarily entail falsity. His focus is rather on the question of what we need to explain animal behavior:

1. Animal behavior can be explained either by attributing thoughts to animals or mechanically without attributing thoughts.
2. The ability to think is a necessary and a sufficient condition for having a soul.
3. Animal behavior does not include anything that could not be explained mechanically without attributing thoughts.
4. Therefore, given the restrictions of human knowledge, animals do not think and their behavior should be explained mechanically.

Descartes' conclusion is more modest here than in the first argument. He admits that we can never really know whether animals undergo experiences and what their possible experiences are like, since the perspective of another being is simply not attainable from our subjective, first-person perspective.

Descartes' theory broadens the scope of mechanical explanation. The core of Descartes' notion of the soul is that thinking depends on it. Life is possible without a soul. In his letter to More on February 5<sup>th</sup> 1649 (CSM III:366, AT V:278), Descartes writes that "I do not deny life to animals, since I regard it as consisting simply in the heat of the heart." For Descartes, life is a material principle that enables the maintenance of the organism. Also sensation takes place at the material level. Already

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this point shows how the Cartesian doctrine is an alternative to the Aristotelian doctrine, in which all life provides a soul.

#### 3.2. DESCARTES' DOCTRINE OF THE 'ANIMAL MACHINE'

Descartes' view of animals can be condensed to the doctrine of the 'animal machine' [AM]:

[AM]: Animals are machines and they have no souls.

According to Descartes, there is a qualitative difference between animals and humans: animals do not have thinking souls like humans do.<sup>16</sup> This difference concerns the very essence of beings, not their accidents, since accidental differences are possible within a species (see for example *Discourse*; CSM I:112, AT VI:2–3). The spiritual substance is not present in animals. Thus, animals do not think and all their action is mechanical. It should be noted that AM applies also to humans as far as their bodies are concerned. Descartes is famous for eagerly comparing animals with clocks, but he uses the same analogy also with respect to human bodies. Like animal behavior, a part of human behavior can also be explained mechanically. (*Treatise on Man*, CSM I:99, AT XI:120; Hatfield 1992, 345.) The physiological function of all bodies is based on the properties of matter and natural laws.

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<sup>16</sup> According to Cottingham (1993, 15), this is the reason why Descartes uses the word *bête* or *brutum* (beast) to refer to animals and not the word *animal*, whose root is in the Latin word *anima*, soul. However, in the Aristotelian-scholastic conception of the soul the word *animal* refers to lower animals such as oysters and *brutum* to higher animals such as dogs. They have sensibility in common, but only the latter are capable of autonomic movement. (Wild 2006, 31–2.)

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According to the AM, animals are machines. Without any particular expertise in animal physiology, it is, however, easy to see that there is something essentially different in the functioning of, say, elephants and cell phones; even besides the obvious fact that elephants are organic beings and cell phones are artifacts. Descartes, however, thinks that it is in principle possible to construct an animal but not a human. Animals differ from human-built machines only in that their structure is more complicated. (*Discourse*, CSM I:139, AT VI:55.) The constructor of animals must be very skilled. Descartes (letter to More February 5<sup>th</sup> 1649, CSM III:366, AT V:277) regards animals as automata built by nature.

Cottingham (1978, 551) splits the doctrine of the AM into seven assertions:

(1) Animals are machines. (2) Animals are automata. (3) Animals do not think. (4) Animals have no language. (5) Animals have no self-consciousness. (6) Animals have no consciousness. (7) Animals are totally without feeling.<sup>17</sup>

These assertions capture the idea of animal machines. Animals are machines because they function mechanically; they are automata because they move by themselves; they do not think since they are material; they have no language since language requires thinking and an immaterial substance; they have no self-consciousness because that, again, is not possible at the material level; the same goes for consciousness (provided that consciousness is understood in the cognitively demanding sense or that the doctrine is given an eliminativistic interpretation); and finally, they have no feelings as far as they are understood as modes of thinking.

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<sup>17</sup> Periods added by me.

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Cottingham (ibid.) claims that Descartes agrees with the first five assertions and is unclear with the sixth but, unlike the standard interpretation suggests, there is no reason to accuse him of asserting the seventh one, which has been characterized as monstrous (Cottingham 1978, 552). For example, in his letter to More on February 5<sup>th</sup> 1649 (CSM 366, AT V:278), Descartes claims that “I do not even deny sensation [to animals], in so far as it depends on a bodily organ.” As to Cottingham’s sixth assertion, Carriero (2009, 24; 70–1; 366) and Morris (2000, 404–6) point out that the issue of consciousness is not as central for Descartes as judgment and rationality are.

The exact relation between sentience and thinking is a hot issue in Descartes’ notion of animals. Descartes does not deny sensations from animals, but he does deny thinking from them. So far, this sounds simple. The problem is that Descartes counts sense perceptions, or conscious sensations as thinking. At the same time, he attributes various emotions to animals, such as joy or fear. This seems like a serious contradiction. The question is, is there room for any kind of animal experience in Descartes’ view of animals. Reception of sensory information is an essential element of sentience. This, however, can be interpreted either only in physiological terms, or as having also an experiential aspect. Is it possible for animals, as machines ingeniously built by nature, to be to some extent aware of their feelings without it being necessary to ascribe a thinking soul to them?

When reading Descartes, I think it is important not to confuse sensations with phenomenal consciousness. My suggestion concerning the most plausible interpretation is that even though it theoretically is possible to

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argue that in Descartes' system sensations are like something, even not much, to their subject in the physiological level alone, this makes sense only if there is a thinking soul that has access to them. Therefore, interpretations that claim that animals can have phenomenal consciousness are incompatible with Descartes' view. Understood like this, sensations are not much more than mechanical reactions. Only when the soul steps into the picture, these states can be perceived and we can talk of sense perceptions.

#### **3.3. SENSATIONS AND THINKING**

Cartesian scholars disagree on the correct interpretation of the doctrine of AM. The standard interpretation (introduced above) claims that Descartes regarded animals as nothing but machines and wanted to deny them sentience and even life along with thinking. The standard interpretation flourished already in early modern philosophy. For instance, Hermann Samuel Reimarus and Georg Friedrich Meier read Descartes according to it. In the last few decades, some authors, such as John Cottingham (1978) and Stephen Gaukroger (2002), have questioned the standard interpretation by claiming that Descartes' account allows of some kind of animal experience. This interpretation can further be divided in two strands. The moderate interpretation, one that Cottingham defends, claims that animals do have experience but it is unconscious. Gaukroger represents the radical interpretation and claims that, in Descartes' view, "[s]entient animals have not only cognitive states but affective ones as well" (Gaukroger 2002, 213).

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The fourth option is to acknowledge the (apparent) inconsistencies in Descartes' writings on animal sensations without preferring either way to read them and explaining away the other as a rash statement. There are two strategies how to proceed from here. This issue can be recognized as an unsolvable problem in Descartes' view; or it can be claimed that even though Descartes seems to be contradictory here, it is possible to construct a consistent interpretation of his view concerning animal sensations.

#### **3.3.1. Sensations: four interpretations**

The important thing in reading Descartes' mechanistic theory on sensations is that it is directed against the hierarchical Aristotelian model of souls. Aristotle divides the soul in three parts all of which have their own functions. The vegetative soul is responsible for nutrition and growth. It is a necessary and a sufficient condition of life, and is present already in plants. The sensitive soul makes sense perceptions possible, and the rational soul contemplation. Animals have a sensitive soul, humans a rational soul. The lower functions of souls are present also in the higher ones. The soul is always a unity, but not all souls are similar. (Aristotle, *De Anima / On the soul*, 414a29–415a14.)

Descartes claims that it is unnecessary to assume different kinds of souls since a rational soul is the only kind of soul needed. The functions of lower souls, such as growth and sensation, can be explained mechanically. Descartes' extension of the scope of mechanical explanation is

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radical. He claims that mechanics can do a great deal more than previously thought, namely explain sensation and animal action. (Morris 2000, 403.)

In his reply to the sixth set of objections (CSM II:294–5, AT VII:436–7), Descartes divides sensory response into three grades: 1) “the immediate stimulation of the bodily organs by external objects” (sensation), 2) “the immediate effects produced in the mind as a result of its being united with a bodily organ which is affected this way” (perception), and 3) “the judgments about things outside us” (understanding). Only the first grade is material; the soul plays an important role in the second and the third grade. The second grade captures the interaction of the two substances. Animals remain in the first grade, whereas humans have all three grades. The problem is whether mindless animals can experience their sensations.

This is how Descartes’ theory works in practice: Catherine is walking barefoot and steps on a stone. The stone causes pressure on Catherine’s sole. This pressure activates tiny, string-like fibers inside the foot, and they deliver the message of the incident to the pineal gland (which Descartes takes to be the seat of imagination and soul but which, however, exists also in animals). In the pineal gland, the movement of the fibers activates the animal spirits, which Descartes describes as wind- or flame-like particles in the blood that are responsible for many functions of the body. The animal spirits react to the stimulus by activating the appropriate muscles and other parts of the body, in this case the muscles of the foot which then lift the foot away from the stone that caused the pain. (See *Treatise on Man*, CSM I:101–2, AT XI: 141–2.)



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All this can happen very fast, as a reflex, without Catherine's rational deliberation. There does not have to be any temporal delay between the sensory stimulus and the activation of the animal spirits. The tiny fibers are like strings with a bell attached to one end: "just as when you pull one end of a string, you cause a bell hanging at the other end to ring at the same time" (*Treatise on Man*, CSM I:101, AT XI: 142). If Catherine were an animal, this would be all there is for her sensation. Since she, however, has a soul, she can become conscious of this sudden pain by perceiving it through her soul. Now she can further articulate to herself the judgment, "My foot hurts". This is the third grade of sensation. Let us now look at three ways to understand animal sensation in Descartes' system:

#### **(i) Standard interpretation: no experience**

The standard interpretation includes all assertions in Cottingham's list in Chapter 3.1. In Descartes' mechanistic doctrine, there can be sensations that are not experienced, or phenomenally conscious. The sensations of animals are just like the pullings-of-a-string described above without them being like anything to the animal. The sounds that animals make are comparable to the sounds of organs: they are physiologically necessitated, not actively produced by the animal as expressions of some kind of an emotion, feeling or intention.

A thermostat and a guided missile react mechanically to changes in the environment. A thermostat reacts to changes in the temperature by turning on when the temperature falls below a certain level and turning off

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when the temperature exceeds that level. A guided missile uses heat as a clue of the location of its target. What seems like a complex, voluntary action that requires thinking can in reality be based on much simpler, mechanical processes. However, hardly anyone is willing to attribute beliefs or even representations to thermostats or missiles.

How is animal behavior, then, different from the behavior of a guided missile? Hermann Samuel Reimarus (1773, § 209, 215), a philosopher of the Enlightenment, discusses the differences between animal and mechanical action in his treatment of Descartes' view of animals arguing that a machine moves from one place to another in a straight line, whereas an animal can find many routes to the same place. He illustrates this through a detailed example of a dog finding the best route to a table full of delicacies after having realized that it is not possible to reach it through the most direct route by jumping. A guided missile does not necessarily move in a straight line, but the important thing is that it responds only to one clue of the environment, namely heat. Animals are far more flexible, and the variety of possible clues they react to is wider. It is, however, easy for Descartes to respond to this criticism by pointing to the carefully designed precision mechanics of animals.<sup>18</sup>

This interpretation captures the common understanding of Descartes' view of animals as a hostile view that justifies cruel treatment of animals. It is often associated with the vivisections performed and described also by Descartes in his studies of anatomy (see McCance 2008, 77–82). This was also the common interpretation in early modern philosophy. Reimarus (1773, § 109, 211), for example, formulates Descartes' doctrine as follows: “All animal actions could be explained

<sup>18</sup> See Camp's (2009) division of possible languages of thought in Chapter 2.3.

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from mere mechanism without the permission to ascribe them a soul, life, feeling or representation.”<sup>19</sup>

Reimarus looks at Descartes’ writings from a physico-theological point of view, where nature is seen as demonstrating God’s perfection. He thinks that Descartes’ notion of animals, which depicts animals as soulless machines, is an insult to God: “[T]his view [...] robs the world of so many thousands of species of living creatures that it renders most of the world dead and incapable of all happiness, which defames the perfection of the master as well as his work.”<sup>20</sup> (ibid. 212; see also § 7, 9.)

#### **(ii) Moderate interpretation: unconscious experience**

Descartes often hints at there being some kind of awareness in animals. Therefore, many authors consider the standard interpretation insufficient. However, Descartes’ writings do not allow of a cognitively demanding notion of animal experience since it is not possible without a thinking soul; and some authors, such as Cottingham (1978), have argued that animal machines do have experience, but it is unconscious. Markus Wild (2006, 173) aptly calls this a yes-but-doctrine: “Animals do have sensations but they are not conscious of it.”<sup>21</sup> Unlike the standard interpretation, this view allows attributing feelings to animals.

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<sup>19</sup> “man könne alle Handlungen der Thiere aus dem bloßen Mechanismo erklären, ohne daß man ihnen eine Seele, Leben, Empfindung oder Vorstellung zueignen dürfte.” (My translation.)

<sup>20</sup> “[Diese Meynung] beraubt . . . die Welt so vieler tausend Arten der Lebendigen, sie machete den allergrößten Theil der Natur todt, und aller Glückseligkeit unfähig; welches die Vollkommenheit des Werkmeisters sowohl als seines Werkes schmälert.” (My translation.) It might be helpful to already keep in mind here that the connection between representations and the soul is important for Kant.

<sup>21</sup> My translation. (“[Tiere haben] Empfindungen, aber sie haben kein Bewußtsein davon.”)

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According to Cottingham (1978, 555), Descartes counts only such sensations as thinking that are accompanied by reflective consciousness, that is, the mind's awareness of its own representations. In animals, then, there are sensations but they are unconscious. Pain is perhaps the most obvious example of a sensation that is not perceived through reason but it is sensed (*Meditations*, CSM II:56, AT VII:81). In humans, body and soul form a whole, which makes it difficult to differentiate between bodily and mental events. Humans can consciously form a judgment "I am in pain", while in animals, we can imagine, there just wafts an indefinite sensation of pain, and it is not even clear what this kind of sensation means for the animal. Does it just serve as a stimulus to somehow change the situation to get rid of the sensation, or does it include a feeling of distress?

Cottingham bases this interpretation on numerous textual passages in the writings of Descartes. Peter Harrison (1992, 224), however, reminds us that Descartes made a difference between sensations as feelings and sensations as passions, and claims that Cottingham does not take this division into account but takes all passions as feelings. Descartes assumed that awareness of passions is possible—but not necessary—only for humans:

As for the movements of our passions, even though in us they are accompanied by thought because we have the faculty of thinking, it is nevertheless very clear that they do not depend on thought, because they often occur in spite of us (letter to Newcastle, November 23<sup>rd</sup> 1646, CSM 3:303, AT IV:573).

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The passions of animals cannot, of course, be connected to the soul since animals have none. There is thus no reason to think that animals are sentient beings. Their reactions to their environment are mechanical, and they cannot be regarded as subjects of experience.

It should be kept in mind that Cottingham understands consciousness as a discursive capacity that makes possible language and judgment. It is, however, difficult to understand what exactly the unconscious sensations would be like, unless they are understood at the physiological level without any qualitative element but then this interpretation is not different from the standard interpretation in any relevant sense. For a feeling, it is crucial that *somebody* feels *something*, and without a conscious subject, the qualitative element of the feeling disappears.

#### **(iii) Radical interpretation: experience**

Some authors think that attributing subjective experience to non-thinking animals is not incompatible with Descartes' mechanistic view. Gaukroger (2002) constructs this kind of interpretation, even though he also acknowledges the lack of clarity in Descartes' expressions concerning his exact view of the possibility of animal experience.

Gaukroger (2002, 203) compares the principle of animal sentient action with the principle of non-sentient action: non-sentient action is based on reflexes and governed by a causal mechanism whereas sentience enables information processing and interpretation of stimuli. The way animals behave suggests that they are not completely determined through a causal mechanism but there is some degree of rational reflection involved. Not all clues are given the same weight.

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From this Gaukroger (ibid., 200) concludes that non-thinking animals are aware of their environment. He is even ready to allow cognitive states to them, even in the Cartesian context. What the immaterial substance and the capacity to think add is the unity of these states and the capacity to form judgments. (Ibid., 223.) In animals, representations are thus “fragmented and dispersed” (ibid.), and their experience is probably very different from ours:

[T]he automaton can have a representational response to a stimulus without that response taking exactly the same form as a human sensation: what an animal experiences when it perceives color as a result of a visual stimulus is not necessarily the same as what we experience when we perceive color under these circumstances. (Gaukroger 2002, 201–2)

Gaukroger suggests here—much like Nagel in his famous article on bats (1974)—that even though we cannot know what animal experience is like and even though it probably is not justified to attribute animals the same kind of experiences that we have, we can nevertheless suppose that it is like something.

Gaukroger uses Descartes’ doctrine of the pineal gland as an argument for his interpretation. In the Cartesian physiology, representations are formed on the pineal gland at the material level. The pineal gland is like a neural TV screen that projects the information that has been delivered through the sense organs. In humans, these representations are then available for the mind to consciously look at and judge on. Nevertheless, it is quite correct to say that also animal machines do have representations. It is, however, another issue whether animals are aware of the

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content of representations. It might as well be that there runs a flux of representations in the pineal glands of animals without them having any idea—or experience—of that, the function of the representations just being the generation of relevant physiological reactions. According to Gaukroger (2002, 201), however, this would make no sense. Memory, which Descartes ascribes also to animals, is also based on the pineal gland.<sup>22</sup> Remembered representations are formed again in the gland.

Gaukroger's move from corporeal representations to awareness seems rather bold. Moreover, it makes Descartes an identity theorist: if animals do not have minds but do have brain states of which they are aware (that is, the representations on the pineal gland), then animal experience, which does not amount to conceptual capacities which provide a soul, equals brain states. The Cartesian identity theory functions at the level of sense perceptions. Conceptual thinking is not a brain state but an action of the immaterial substance. In his letter to Newcastle on November 23<sup>rd</sup> 1646 (CSM III:304, AT IV:576), Descartes himself hints at this direction:

The most that one can say is that though the animals do not perform any action which shows us that they think, still, since the organs of their bodies are not very different from ours, it may be conjectured that there is attached to these organs some thought such as we experience in ourselves, but of a very much less perfect kind.

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<sup>22</sup> On the mechanistic explanation of memory, see *Treatise on Man* (CSM 106–7, AT XI:177–8).

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The Cartesian identity theory is, however, short of textual support—in fact Descartes provides textual support against this view in the replies to the objections to his *Meditations*:

If [...] they [the opponents of dualism] take the view that the formation of thoughts is due to the combined activity of parts of the brain, they should realize that this view is not based on any positive argument, but has simply arisen from the fact that, in the first place, they have never had the experience of being without a body and that, in the second place, they have frequently been obstructed by the body in their operations. (CSM II:95–6, AT VII:133.)

Rather than being an interpretation of the Cartesian account, this enterprise would be more feasible as a mechanistic view arising from Cartesian background<sup>23</sup> The tenets of the standard or the moderate interpretation could, however, argue that even if there were a series of representations on the pineal gland of animals, experience would not follow. Instead, these representations affect animal behavior by activating relevant animal spirits in a specified way.

#### **(iv) The open interpretation: mechanism + contradictory views on the possibility of experience**

As far as the notion of phenomenal consciousness is applicable to Descartes' philosophy, Descartes' writings reflect some kind of uncertainty

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<sup>23</sup> The possibility of identity theory is raised in the objections to *Meditations*, but Descartes firmly rejects it.



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concerning the phenomenal consciousness of animals. On the one hand, he seems to say that animals do not experience anything. For example, in the *Rules for the Direction of the Mind* (CSM I:42, AT X:415), he writes that “we refuse to allow that [animals] have any awareness of things”, and in his letter to Mersenne on 11 June 1640 (CSM III:148, AT III:85), he claims that animals cannot feel pain:

I do not explain the feeling of pain without reference to the soul. For in my view pain exists only in the understanding. What I do explain are all the external movements which accompany this feeling in us; in animals it is these movements alone which occur, and not pain in the strict sense.

On the other hand, he often hints at animal feelings. In the *Passions of the Soul* (CSM 1:348, AT XI:370), he seems to attribute sensations to animals: “When a dog sees a partridge, it is naturally disposed to run towards it; and when it hears a gun fired, the noise naturally impels it to run away.” This passage can, of course, be understood as referring to seeing and hearing as merely neurological occurrences without reference to any kind of visual or auditory experience. It is more difficult to see what emotions or feelings would be without them being experienced. Let us look at the following passage from Descartes’ letter to Newcastle (AT IV, 574): “All the things which dogs, horses and monkeys are taught to perform are only *expressions of their fear, their hope or their joy*; and consequently can be performed without any thought” (my italics). What is left of fear, hope and joy if they are reduced to mere physiology?

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In the third set of replies to objections of *Meditations* (CSM II:128, AT VII:182–3), Descartes makes an interesting comparison that might help us to solve this. Just as it is different just to see a lion than seeing it and being afraid of it, “seeing a man run is different from silently affirming to oneself that one sees him”. This seems to hint at the possibility of phenomenal consciousness of non-thinking animals: animals could have experiential sensations without any kind of capacity to analyze their contents. The “seeing a man run” is something that just might happen when looking around without having to amount to a conscious perception, while “silently affirming to oneself that one sees him” requires paying attention to what is seen. The first case can be just a mechanical sensation amounting only to certain physiological reactions, while the second case is also conscious.

Some authors try to explain away passages that conflict with their interpretation of the subject. As Vili Lähteenmäki (2009, 19) points out, Cottingham and Gaukroger depend on selected passages in Descartes’ writings to support their interpretations. However, they both also mention that animal experience in the Cartesian framework is a problem, which perhaps cannot be satisfactorily solved, even though they both construct coherent interpretation of Descartes’ view of animal sentience (Cottingham 1978, 557–9; Gaukroger 2000, 201). Some authors (such as Wild, Lähteenmäki and Carriero) confess that there are unsolved and perhaps unsolvable difficulties and contradictions in Descartes’ writings.

Wild (2006, 175) argues that Descartes did not want to deny animals feelings but to avoid being metaphysically inconsistent, he had to. There are, then, two different issues concerning Descartes’ notion of animals:

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first, the theoretical notion of animals in the framework of Cartesian dualism, and secondly, Descartes' own idea of animals as beings that experience and feel. According to this view, animals remain a huge problem for Descartes' metaphysics. The way animals seem to be simply does not fit into the metaphysical framework.<sup>24</sup>

Lähteenmäki (2009) argues that in Descartes' account phenomenal experience of material animals would be possible (in the sense of conceivability) without thinking—this is the case with infants, for example—but Descartes nevertheless refrains from attributing phenomenal consciousness to animals since it would amount to ascribing modes of thought to them. In other words, Descartes' focus is not in the claim that animals do not have experience; but rather that it is not necessary to attribute experience to animals.

John Carriero (2009) does not offer a clear answer to the question of animal experience in Descartes' view, and therefore also his interpretation is suitable under this heading. He points out that Descartes talks of “a purely mechanistic sensing” of animals and “a cognitive sensing” in humans, but that Descartes is unclear concerning the content of mechanistic psychology, leaving its possibility open (*ibid.*, 151).

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<sup>24</sup> On this so-called common sense strategy for defending animal sentience and consciousness, see Allen 2004, 621–25.

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Catherine Morris (2000, 403–6) argues that our current concepts of consciousness make it difficult to really understand Descartes' doctrine of AM. She points out that Descartes wanted to keep thinking and sentience strictly separated, and since humans have both faculties, sensation in us is substantially different from sensation in animals, but this does not mean that animals, who do not think, would not have sensations or feelings. What Descartes wanted to deny animals is thinking and consciousness in the meaning of rationality and capacity of judgment and free will, not feelings. It is an essential part of human nature that the body and the soul are closely linked with each other. It is difficult—if not impossible—to imagine what a feeling would be like without making a judgment concerning it but, nevertheless, it is conceptually possible for the qualia to exist without a judging soul.

In all of these four interpretations it is important to distinguish between mechanical reaction, sentience, consciousness and thinking on the one hand; and between passion, sensation and sense perception on the other. Mechanical reactions and passions are possible at the unconscious level. It is consciousness that makes sensations meaningful to the subject. Consciousness enables the capacity to choose how to react to them, or how to use the information provided by them, and most authors argue that it is consciousness that makes experience possible.

The (i) standard interpretation allows of talking only of passions and sensations as mechanical reactions. The (ii) moderate interpretation understands sentience as something a little more than a mere mechanical reaction, but not yet amounting to consciousness. The (iii) radical interpretation sees no problem in sensations being phenomenally conscious

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in animals, but this consciousness does not amount to self-consciousness or thinking. The (iv) open interpretation says that Descartes' doctrine of animals is incoherent.

According to the doctrine of AM, Descartes means by animal sentience mechanical reactions to sensible stimuli. For humans, it is possible to be aware of such reactions. Today, the ability of animals to feel pain and to suffer is commonly acknowledged (see, for example, Allen 2004; detailed literature revue on the subject in Aaltola 2012, 12–20), and it serves as a starting point, for instance, for the Protection of Animals Act. However, it is supposed to be valid primarily for mammals since the nervous system of invertebrates and fish is remarkably different from ours.

The ability of fish to feel pain has, in particular, invoked a great deal of discussion. James D. Rose (2002 and 2014) argues against the perception of pain in fish. Rose argues that although fishes react to painful stimuli, they do not feel pain since they do not have a neocortex, which in humans is associated with conscious experience. In fishes, he claims, we can talk only about nociception, that is, a mechanical reaction which does not provide conscious experience of pain.<sup>25</sup> There is, however, also research (for example Sneddon 2003 and 2006) that hints to the direction that Rose is mistaken and in fact fishes do feel pain.

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<sup>25</sup> In humans, nociceptical reactions can occur in medical operations performed under local anaesthesia (Rose 2002, 14). The question of pain perception in fishes is still unsettled. For the arguments for the capacity of fish to feel pain, see Sneddon 2006, and on the whole controversy, see Allen 2013. It is, however, impossible to achieve absolute certainty concerning subjective experience of animals through neurological means (Cf. Peter Sandøe, *B. Forkman and S.B. Christiansen 2004*, 121–126.) For a more detailed discussion on the subject, see Chapter 2 (the problem of animal experience).

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There is a great deal of similarity in the views of Rose and Descartes on the consciousness of animals (in Rose's case, fishes). Descartes' argument is, however, more radical since he refrains from attributing consciousness even to animals that have a nervous system similar ours. However, analogical reasoning is not always reliable in comparative psychology. A certain nervous structure that in humans is associated with a certain cognitive function is not a necessary condition for such a function. For example, birds do not have a neocortex which in humans (and other mammals) is responsible for many cognitive processes, such as the processing of sensorial information, reasoning and language; many birds, nevertheless, are capable of complex cognitive action.<sup>26</sup>

The Cartesian view of animals leads easily to complex mechanical explanations of animal behavior. It certainly is possible to give a mechanical explanation for such phenomena such as hunger or pain,<sup>27</sup> but it is hard to see how a mere mechanism without any kind of awareness can bring about actions such as preying that requires a constant focus on the prey in an ever-changing environment. Would it be possible to talk about some kind of bodily consciousness with regard to animals? Could phenomenal consciousness be possible without a soul? I think that it is exactly this that Cottingham (1978, 558) wants to say in observing that the sensations (such as pain or anger) that Descartes attributed to animals require some kind of consciousness, if not self-consciousness, which requires second order consciousness of one's own representations and of one's being the subject of one's representations. If this is the case, then Cottingham's view comes very close to that of Gaukroger.

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<sup>26</sup> For a general summary on this subject, see Aaltola 2012, 11; on differences in brain structures, see Rogers 1997, 95 –129; as an example of cognitive skills in birds, see Pepperberg 2006 on problem solving in parrots.

<sup>27</sup> See, for example *Principles of Philosophy*, CSM I:281, AT VIII:318.

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#### 3.3.2. Thinking

Morris (2000, 401–2) aptly explicates the twofold goals of Descartes' doctrine of AM: The first goal is to argue that we need only one kind of soul, namely rational souls, and we can well do without attributing them to animals (see for example letter to More on February 5<sup>th</sup> 1649, CSM 3:365, AT V:276). His second goal is to refute arguments on animal thinking, presented for example by Montaigne and G.F. Meier, who argue that animals do think but their thinking is essentially different from the conceptual, human thinking (see, for example, letter to Newcastle, November 23<sup>rd</sup> 1646, CSM 3:302, 303; AT IV:573, 575).

Descartes claims that there is only one kind of thinking. Thinking is an action that can be explained only through an immaterial substance. Thinking is the attribute, or the principal property of the immaterial substance whereas extension characterizes the corporeal substance (*Principles of Philosophy*, CSM I:210, AT VIIa:25). Matter cannot think. Thus, thinking makes humans different from animals. In this section, I will look at what Descartes understood by thinking.

In the *Principles of Philosophy* (CSM I:195, AT VIIa:7), Descartes explains that he means by thought “everything which we are aware of as happening within us, insofar as we have awareness of it.” He continues by saying that thinking includes “understanding, willing and imagining” and also “sensory awareness” (ibid.). In the Third Meditation (CSM II:25–6, AT VII:37), he divides thoughts into ideas that are, “as it were the images of things”, and attitudes to ideas such as volitions, emotions and judgments. Awareness seems to be a central characteristic of thoughts. How is this awareness, then, to be understood?

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Can phenomenal consciousness count as such awareness? If we admit this, we would be able to refute the radical interpretation, since the attribution of phenomenal consciousness to animals would amount to attributing thinking to them, which is precisely what Descartes denies. Norman Malcolm (1973, 11) suggests that the presence of a propositional content is a necessary condition for thoughts in Descartes' view.

The key to understanding Descartes' apparent contradictions concerning sensations as such and sensations as thinking, according to Malcolm (1973, 11–13), lies in the propositional content of thoughts. He claims that conscious sensations have a propositional content and should therefore be counted as thoughts. This means that the subject can form a judgment concerning the propositional content of the sensation. Pain itself is not propositional, but the judgment "I am in pain" is. According to this view, animals do not think and do not have propositional states of mind, but they can still have experiential sensations. As a theory of sensations, this view would count as a radical interpretation, according to which experience is compatible with mechanism.

Malcolm's argument focuses, however, on the fact that Descartes' view contradicts the everyday practice of attributing thoughts to animals. He claims that Descartes does not take the difference between the expressions "*S* thinks that *p*" and "*S* has the thought that *p*" into account and thus understands all thinking in the latter, cognitively more demanding, sense. Malcolm claims that it is justified to talk about animal thinking in the former sense, which does not require attributing a propositional content. A person walking on a slippery street certainly thinks that the street is slippery—as far as she has noticed the street being slippery—without



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expressing this thought in any way, that is, without the thought having a propositional content. This unconscious, or unexpressed thought still affects the way she walks.

Malcolm presents an example which has provoked a great deal of discussion: A dog chases a cat. The cat flees up into an oak tree and then jumps to a maple tree without the dog noticing. The dog stays barking in front of the oak tree. Now, it seems justified to say that the dog thinks—and has a false belief—that the cat is still in the oak tree. However, according to Descartes, this is by no means permissible, since animals cannot have any kind of propositional mental states. (Malcolm 1978, 13–16.) But the inability to express one's thought does not mean that there is neither thinking nor sentience. Malcolm's argument is intended to show that Descartes' conclusion that animals cannot have thoughts because they do not express them, does not follow.

Malcolm's description of animal thinking justifies explaining animal behavior through thinking. It is also a theory of animal experience. Malcolm, however, commits exactly the mistake Descartes argues against in refuting the Aristotelian notion of the hierarchical system of souls: Malcolm assumes two kinds of thinking. To count as a serious interpretation of Descartes doctrine of thinking, Malcolm should admit that what is commonly understood as animal thinking is in fact a kind of sensation. Malcolm's view that a thought is different from its verbal expression has also been questioned by Donald Davidson (2001 [1982], 95–105). Since Davidson's view concentrates on language, I will postpone its discussion to the next chapter.

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The Second Meditation (CSM II:20–2, AT VII: 30–3) illuminates the function of thinking in contrast to sensation. There, Descartes investigates a piece of wax. Its properties change according to the temperature. A cold piece of wax is solid, it makes a sound when it is tapped, it tastes mildly like honey and has a mild scent of flowers, whereas heated wax is tasteless, scentless and liquid and makes no sound when tapped. Descartes concludes that the wax must be perceived in the understanding, not through the senses, since otherwise it would not be possible to grasp the different sense perceptions as relating to the same substance. There are, according to Descartes, two modes of perception. Sense perception relates to superficial properties; the faculty of judgment relates to the substance or being and is clear and distinct:

[F]or what distinctness was there in my earlier perception [of the piece of wax]? *Was there anything in it which an animal could not possess?* But when I distinguish the wax from its outward forms—take the clothes off, as it were, and consider it naked—then although my judgment may still contain errors, *at least my perception now requires a human mind.* (Italics added.)

The perception of something *as* something, regardless of its appearance, requires a thinking soul that can have insight into the very being of the objects of perception. Interestingly, this passage leaves open the possibility of there being a phenomenal consciousness in animals, as a mere consciousness of something, without this something being identified at all *as* anything.

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#### **3.4. EPISTEMIC ISSUES**

Descartes' claims concerning animal minds are clearly at odds with the common sense view of animals as beings that feel and act consciously. Therefore, Descartes must have had good reasons to defend his metaphysical doctrine against this view. In this section I ask whether it is possible for Descartes to get empirical support for his doctrine. How can he justify the claim that animals that so much resemble humans in their behavior are in fact non-thinking beings that hardly have anything that could be characterized as experience? Flexibility of behavior is one argument here; language is another and the most important one.

##### **3.4.1. The flexibility of behavior**

Animal behavior often seems very clever. Furthermore, animals resemble humans physiologically. This is why we tend to think that animals sense and think like we do and that their behavior is based on will and reasoning. It is difficult for Descartes as a strict dualist to draw any kind of conclusions concerning consciousness by looking at animal physiology. As far as he can assume that thinking has anything to do with brains, he has no physiological grounds for denying animals the capacity to think (letter to Newcastle, November 23<sup>rd</sup> 1646, CSM III:304, AT IV:576; letter to More, February 5<sup>th</sup> 1649, CSM III:365, AT V:277). He even regards the argument of physiological analogy as the best one for animal thoughts:

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I see no argument for animals having thoughts except this one: since they have eyes, ears, tongues and other sense-organs like us, it seems likely that they have sensation like us; and since thought is included in our mode of sensation, similar thought seems to be attributable to them. (Letter to More, February 5<sup>th</sup> 1649, CSM III:365, AT V:277)

Descartes (*ibid.*), however, concludes that it is more probable that animals are mechanical than that they have incorporeal, thinking, immortal souls. He refers to animal sensations a little more confidently, but only as far as thinking is not involved (*ibid.*, CSM III 365–6, AT V:276–8).

Even though he does not have any physiological support for his denial of animal thinking, he claims that we do not need a soul to explain animal behavior:

I came to realize, however, that there are two different principles causing our movements. The first is purely mechanical and corporeal, and depends solely on the force of the spirits and the structure of our organs, and can be called a corporeal soul. The other, an incorporeal principle, is the mind or that soul which I have defined as a thinking substance. (CSM III:365, AT V:276)

Descartes then concludes that all movements of animals could “originate from the corporeal and mechanical principle” (*ibid.*). The material substance is completely different from the immaterial substance and is governed by different laws. The changes in both substances must therefore also be explained differently: mechanical explanations are valid in the context of material substance whereas psychological explanations

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through wants and deliberation in the context apply to the immaterial substance. Thinking is a function of the immaterial substance which animals do not have, and therefore all animal behavior is to be explained mechanically.

There are two things that are characteristic of mechanistic behavior: infallibility and inflexibility. Animals have a complex nervous system which makes complex behavior possible. Descartes argues, however, that since animals do not think, they are infallible as far as their physiology is intact. Making errors, in the proper meaning, requires the capacity to think. Let us see why this is so.

Humans make errors because our faculty of true judgment is limited and because we do not use our unlimited free will correctly: “If [...] I simply refrain from making a judgment in cases where I do not perceive the truth with sufficient clarity and distinctness, then it is clear that I am behaving correctly and avoiding error. But if in such cases I either affirm or deny, then I am not using my free will correctly.” (Meditations, CSM II:41, AT VII:59–60.) Errors arise because something is judged to be true or untrue without sufficient understanding of the subject. By making judgments, perceptions are either affirmed or denied, we need will to do that. The concepts of truth and falsity are not applicable to perceptions. Perceptions are more or less clear. If we make judgments based on unclear perceptions, we are likely to make errors.

To take a contemporary example, driving a car is quite automatic (provided that the driver is experienced enough), but it certainly is not advisable to decide suddenly to switch off this autopilot and let think-

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ing guide the driving. It would immediately make driving difficult and slow since the cognitive processes involved in conscious thinking are rather slow. Descartes (letter to Newcastle, November 23<sup>rd</sup> 1646, CSM III:303; AT IV:573) uses sleepwalking as an example of non-thinking, perfect action in humans: “It is said that those who walk in their sleep sometimes swim across streams in which they would drown if they were awake.” The truth of this claim is uncertain, as Descartes himself admits, but the point here is that thinking does not always make the action better.

Since thinking does not interfere animal action, their action is perfect as far as they function properly. Descartes (ibid., CSM III:304; AT IV:575) takes this as a proof of their mechanical ability. Similarly, a clock, he continues, “tells the time better than our judgment does” (ibid.). Descartes claims, for instance, that honeybees are not even able to make imperfect beehives, provided that there is nothing that disturbs the bees’ physiology (*La formation du foetus*, AT XI:518–20; letter to Newcastle, November 23<sup>rd</sup> 1646, CSM III:304, AT IV:575). In the most difficult cases, where explaining animal behavior merely mechanically becomes too complex, Descartes claims God’s ingenuity as the programmer of animals (*Discourse*, CSM I:139, AT VI:56). The flip side of infallibility is inflexibility. Animals can perform tasks only in a fixed way, whereas reason makes possible a creative accommodation of action in new situations. (*Discourse*, CSM I:140, AT VI:56–7). Bees do not invent new ways to build beehives.

In current animal research, flexibility of behavior is still regarded as a sign of rationality. Usually, animal behavior is located between two ex-

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trems: the Cartesian mechanical behavior that is strictly tied to the context and a conceptual generalization that is independent of the context. The flexibility of the action varies according to the species as well as to the context. Furthermore, it makes more sense to talk of “islands” of animal rationality, that is, rationality in certain contexts that are important to the species, rather than universal rationality, which also broadens the scope of rationality to contexts that are irrelevant to the subject. (Hurley 2006, 150.)<sup>28</sup>

#### **3.4.2. Language**

Language is the most important argument for Descartes’ doctrine of AM. Descartes (letter to More February 5th 1649; CSM III:366, AT V: 278) even sees language “as a real specific difference between humans and animals.” Language is a way for the immaterial substance to express itself: thoughts can be expressed through language. Animals, however, do not have language: “[I]t has never been observed that any brute animal has attained the perfection of using real speech, that is to say, of indicating by word or sign something relating to thought and not to natural impulse” (ibid.); and “there has never been known an animal so perfect as to use a sign to make other animals understand something which bore no relation to its passions” (letter to Newcastle, November 23<sup>rd</sup> 1646, CSM III:303; AT IV:575).

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<sup>28</sup> We can of course ask, what, if anything, rationality has to do with experience, what I am primarily interested in in this study (see Khalil 2010 on ascribing rationality to organisms without any neural structures, such as plants). For my purposes, it is sufficient to say that while rationality in itself does not imply experience, rational animal behavior is more likely to be conscious than fixed and inflexible behavior patterns.

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Since animals do not express any thoughts, it is probable that they do not think. Animal sounds are caused mechanically; animals cannot choose whether to utter something or remain silent. They can be compared with squeaks of hinges. They do not count as expressions of thinking but can be explained as utterances of passions. Not having the appropriate organs for talking is not a valid counterargument against Descartes since parrots, for example, do have the ability to talk but they still do not express thinking, they only imitate.<sup>29</sup>

Now, if there were an artificial animal so skillfully constructed that its outer appearance and behavior would be an exact copy of a real animal, we would not be able to tell whether this animal was real or not since animals show no sign of there being any kind of thinking in them. If, again, this machine were a copy of a human being, we would very soon find that out by checking whether it was capable of flexible behavior and creative, meaningful and appropriate use of language. (*Discourse*, CSM I:140; AT VI:56.) This follows from the materiality of animals: the principle of action is the same in artificial machines and animals (*Discourse*, CSM I:139 AT VI:55). It is, however, impossible to construct a human. The immaterial mind is an essential part of humans. It cannot be composed, and language and flexible behavior cannot be mechanically generated.

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<sup>29</sup> This is Descartes' understanding of the subject. He discusses talking parrots in *Discourse on the Method* (CSM I:140; AT VI:57) and in a letter to the Marquess of Newcastle (November 23<sup>rd</sup> 1646, CSM 3:303, AT IV:574). Irene Pepperberg's studies on the cognitive capacities of parrots suggest that parrots are, in fact, able to express their thoughts in language (see for example Pepperberg 2006). Recent studies in cognitive ethology have showed linguistic capacities at least in great apes (on Washoe, the chimpanzee and sign language, see Gardner, Gardner and Van Cantworth [1989]; on Kanzi, the bonobo and lexigrams, see Savage-Rumbaugh, Shanker and Taylor [1998]; and on dolphins, see, for example, Herman [2006]).



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Descartes sees language as a sign of thinking. As Catherine Morris (2000, 412) underlines, Descartes' argument is not that it is absolutely not possible that animals think. Instead, claims Morris, Descartes argues for a weaker claim, namely, that it is *morally certain* that they do not think. Moral certainty means being beyond reasonable doubt. Not expressing one's thoughts does not definitely mean not having thoughts, but since animals never express their thoughts, it is reasonable to conclude that they do not have any. She claims that the apparent inconsistencies disappear once we understand that "it is Descartes' view that it is 'morally certain' but not 'absolutely certain', that non-human animals lack rational souls" (ibid.); and thus "[i]t remains absolutely possible that animals have thoughts but do not express them; but it is nonetheless morally impossible" (ibid., 413).

In contemporary philosophy, the relation between thinking and language is still a vivid topic. For example, Donald Davidson (1982) argues that language is required for having any thoughts. This is not the same as Descartes' argument: Descartes thought that thinking is a necessary condition for language, and Davidson's claim is that language is a necessary condition for propositional attitudes, even beliefs that do not become verbally expressed, and that propositional attitudes (such as beliefs, desires and intentions) are necessary for all kinds of thinking.

Propositional attitudes are holistic: one singular belief is always dependent on other supporting beliefs. Furthermore, having a belief requires having the concept of a belief and the concept of objective, intersubjective truth: to have a concept of a belief is understanding that beliefs have a truth value; they might turn out to be true or false. (Davidson 1982.)

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Davidson does not say that animals do not think. He only says that the concept of intersubjective, objective truth and a holistic web of beliefs are necessary and sufficient conditions for thinking. As far as we do not communicate with animals through shared concepts, we cannot know whether they think or not.

Davidson's holism has often been criticized as being too demanding. Hans-Johann Glock (2000, 2007) suggests moderate holism as an alternative. The network of beliefs does not have to be as extensive as Davidson suggests but some kind of network is still necessary in order to exclude the possibility of a being that only has one single belief. He thinks that the dog's belief of the cat in the oak tree could easily be possible without supporting beliefs concerning the properties of trees in general.

Along with Glock, Jerry Fodor and Ernest Lepore (1992, 11–12) point out that strict holism leads to severe difficulties in the dialogue between scientific theories based on different empirical beliefs. They compare ancient and modern astronomy as an example: from the point of view of modern astronomy, it is impossible even to determine what the ancient astronomers referred to when talking about stars since their beliefs concerning stars did not include facts central to modern astronomy such as their remote location and their relation to black holes or planets.

Davidson does not have the metaphysical burden to take a stance on the question of whether animals think or not, as Descartes did. What Davidson denies is thoughts as propositional attitudes, not sensations. Having mental representations does not amount to thinking in his view. If we

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somehow had access to an animal's mind, we could give a linguistic description of the mental content but in this case it would be us thinking on the basis of the representations of the animal. We would not know what concepts, if any, the animal would use for the purpose.

#### **3.5. CONCLUSION: HOW SHOULD DESCARTES' DOCTRINE OF ANIMAL MACHINES BE UNDERSTOOD?**

As this chapter has shown, the spectrum of interpretations concerning animal sentience in the Cartesian framework is wide. Animals can be understood as robots, or the possibilities of sentience as a physiological reaction can be broadened to include phenomenal experience. A further option is to admit that animal sentience was a stumbling block for Descartes, and he did not succeed in integrating it smoothly into his metaphysics. To conclude this chapter, I will present my view of what Descartes' theory of sensations enables regarding animal experience, ending up to the conclusion that he did not succeed to construct a coherent model of animal experience.

Despite the controversies in Descartes' doctrine of animal machines, at least two things are obvious: first, animals do not think; and secondly, they do have sensations. Language is a means to express thoughts, and beings that use language also think. Thinking also enables creativity in the sense of the capacity to generalize from a familiar context to a new one. Animals do not use language, so Descartes has no reason to assume that they would be capable of the generalizations that language,

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concepts and judgments require. Animals are capable of sensations at the mechanical level. External stimuli cause different internal reactions in animals that make them behave in a certain way. The question is whether these sensations feel like anything to the animal.

Even though thinking includes various mental acts from sense perceptions and feelings to wants and affirmations (see *Meditations*, CSM II:37; AT VII:37), a certain kind of awareness is common to them all. Additionally, they all relate to the capacity of judgment. Judgment consists of the subject of thinking (pain in my foot, for instance) and the propositional attitude toward it (affirmation and probably the desire for it to cease) (ibid.). What is it, then, that thinking adds to mechanical sensations?

A helpful textual passage is Descartes' division of sense perception into three grades presented here in Chapter 3.3.1. To understand the role of thinking in sensations we need to focus on the difference between sensation (grade 1) and perception (grade 2). The relation of perception to judgment is clear: as I perceive that there is a pain in my back, I make a judgment concerning it. This judgment can be just an affirmative notice: "Oh, my back hurts." In this case, perception and judgment are simultaneous. If the pain is not sudden and I am concentrating deeply on philosophical meditations, it might well be that I do not first even notice it. In this case, the sensation is not conscious.

If I am immersed in listening to music while driving a car, I still sense the environment and react to it. The visual properties of the environment are there for me, even though I do not describe their contents to myself

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or even seem to pay much attention to them. It is, however, possible for me to do that whenever I choose. Much of my driving takes place at the physiological level (grade 1), my body reacting to external stimuli.

Perception is a conscious act. It is the first grade where consciousness steps in. It does not, however, have to be the grade where qualia step in. The qualia can be present already at the level of the physiological sensation, as they are in the example of driving a car. Descartes even claims that he does not want to deny sensation to animals “in so far as it depends on the bodily organ” (AT V:278; CSM III:366). What makes my unconscious sensations different from the sensations of nonthinking animals is that since I am a thinking being, I can become aware of them. In animals they always remain unconscious and mechanical.

It could be argued that already this unconscious stage is phenomenally conscious, just like the environment I am driving a car in is phenomenally conscious for me even it is not the object of my conscious attention. However, the question of phenomenal consciousness or the likeness of the experience did not arise for Descartes, since for them to be something to their subject requires awareness, which is possible only for thinking subjects. Even though it would perhaps be possible to construct some kind of an identity theory of experiencing sensations, it would multiply the objects beyond necessity: unconscious qualia without even the possibility of becoming conscious seems to be quite an empty concept, not explaining anything.

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As I have mentioned throughout this chapter, Descartes' doctrine of animal machines is not a biological doctrine of the constitution of animals. It is primarily an answer to the question of what we need to suppose in order to explain animal behavior. We can well do without ascribing to them the capacity to think, which entails consciousness, freedom of choice and morality. We need to ascribe to them only physiological states. But the problem to which Descartes does not give a sufficient answer is, what is left of emotions if the experiential aspect is omitted?

#### *4. Kant's view of the constitution of experience*

#### **4. KANT'S VIEW OF THE CONSTITUTION OF EXPERIENCE**

One of the big questions that puzzled Kant was how it is possible that the content of our experience corresponds to the content of our judgments. How is it possible that different things affect our minds in a different way; and, specifically, how is it possible that we can ascribe meanings to different effects, notice that some effects are similar and some not, and refer to objects through concepts? To solve these problems, Kant developed a detailed theory of the function of the mind with a focus on the faculties of sensation, understanding and reason. Kant's framework is the doctrine of transcendental idealism, according to which the only access to the external, noumenal world is through the framework of our own minds; we cannot access it directly as it is.

In this chapter, I will focus on Kant's view of the faculties of the mind. What mental faculties are there and what do they do? How do they contribute to experience? This chapter sketches the theoretical background for the next chapter, which concentrates in a specific area in this field, namely animal experience. To be able to profoundly understand the role of the lower mental faculty that Kant ascribes to animals, it is useful to relate it to human experience: what is similar, what is different?

To begin, let us see what Kant means by experience. 'Experience' can refer to the product of the passive capacity of perceptions in general; or it can have a narrower meaning as a constitution of connected perceptions. In the latter meaning, the activity of the experiencing mind is crucial. Usually Kant speaks of experience in the latter sense, where understanding is a necessary part of it. For example, in *Prolegomena* (§ 34,

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Ak.4:316), he describes experience “as the product of the understanding from materials of sensibility.” Both elements are necessary for experience, so that experience can also be defined as a judgment that expresses an empirical cognition (BF, Ak. 18:318). Experience in this sense cannot be ascribed to animals. I am interested in experience as an awareness of perceptions.

Mere thinking, or pure consciousness, does not count as an experience; it is rather the framework of the temporal experience that is not itself temporal (BF, Ak. 18:319). Thinking can, however, be experienced as a determination of the mind. The object of the experience, in this case, is the thinking, not the object of thinking (which, of course, determines the content of the thinking in question). This latter case is inner experience, whereas experience of objects is outer experience.

Kant (for example in MM, Ak. 29:880–1) divides the faculties of the human mind into three parts: the cognitive faculty, the faculty of pleasure and displeasure, and the faculty of desire. Each faculty has a higher and a lower form, as shown in Table 1:

**Table 1.** The faculties of the human mind

	Lower faculty	Higher faculty
<b>The cognitive faculty</b>	Sensibility	Understanding and reason
<b>The faculty of pleasure and displeasure</b>	Based on sensible stimuli	Based on understanding and reason
<b>Faculty of desire</b>	Based on sensible stimuli	Based on intellectual motives



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The higher faculties are characterized by the activity of the mind and its independence from sensible stimuli; the lower faculties by the passivity of the mind and its dependence on sensibility. Another, complementary division that might be useful is the division of the faculties according to the sources of the cognition they generate. These faculties are sense, imagination and apperception. Kant (KrV A 94/B 127) describes them as “three original sources (capacities or faculties of the soul), which contain the conditions of the possibility of experience, and cannot themselves be derived from any other faculty of the mind.” The first division is useful in explaining action, the second in explaining the integrity of experience.

In this chapter, I will look at Kant's conception of the faculties of the mind to find out how each faculty contributes to experience. I will begin by looking at the reasons why Kant thought that it was necessary for living creatures to have minds. Then, I will focus on the functions of the cognitive faculty. Even though Kant thinks that animals do not have higher cognitive faculties, it is important to know how they function, since it tells us how animal consciousness differs from ours. In Chapter 4.4., I will explain how experience starts to form when sensoral inputs become perceptions through the functions of the inner sense and reproductive imagination.

Chapter 4.5. goes even deeper into Kant's theory of experience by discussing the threefold synthesis which contributes to the increasingly discursive understanding of experience. Before concluding, I will shortly deal with the faculties of pleasure and displeasure and of desire, which are important with respect to the issue of animal ethics and welfare.

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The topics of this chapter are wide-ranging and controversial, and each of them could be an independent topic of a doctoral dissertation. My aim here is to define what I take to be the best way to understand them so that we have a firm foundation for proceeding to Kant's theory of animal experience.

### **4.1. THE FOUNDATION OF EXPERIENCE: THE SOUL AS THE PRINCIPLE OF LIFE**

In his discussion concerning the principle of life, Kant's focus is on animal souls, human souls and spirits. Plants are of no interest to him. Animal souls are dependent on their connection to the body, whereas spirits exist independently with no connection to the body. The human soul is connected to the body but is not dependent on it, as the capacity to think is an action of the mind. (L1 Ak. 28:274.) The human soul is the most versatile kind of soul: it has the faculty of sensation provided by the body, as well as the capacity to independent thinking provided by the soul.

Kant argues that Descartes' doctrine of the AM is not plausible, since matter cannot generate life. Life necessarily requires an immaterial principle, a soul. Kant argues that life must be inherent in something immaterial, since it is of a different nature than matter, whose function is to occupy a determined area of spatial dimension. Life is an "inner capacity to determine [oneself] voluntarily" (*Träume* Ak 2:238n, italics removed). Beings equipped with an "own power of will [that] is capable

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of spontaneously determining and modifying itself" are living. In the *Critique of Practical Reason* (Ak. 5:9n), Kant writes that "life is the faculty of a being to act in accordance with laws of the faculty of desire." Spontaneity, activity, subjectivity and will are the most central features of a living being. They cannot be properties of matter. Matter can be moved only by external forces. Merely material beings cannot have any intentions.

This immaterial principle of life that enables spontaneous action cannot itself be perceived, but we can easily see whether it is inherent in material substances:

Animals are not mere machines or matter, but they have souls; for everything in the whole of nature is either inanimate or animate. All matter [...] is inanimate. [...] When, e.g., we perceive a mote on a paper, then we look to see whether it moves. If it does not move of itself, then we hold it to be inanimate matter [...]. But as soon as a matter moves, we look to see whether it moved itself voluntarily. If we perceive that in the mote, we say that it is *animate*, it is *an animal*. An animal is thus an animated matter, for life is the faculty for determining oneself from an inner principle according to the power of choice. Thus, if a matter moves, then it follows that there is in it such a separate principle of self-activity. But only a being that has cognition is capable of this principle of thinking and willing. Matter can move only by means of such a principle. But such a principle of matter is the soul of the matter. (L1, Ak. 28:274–5.)

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In this passage, Kant sets two criteria for a living being: it must have an inner principle of movement and representations. The principle of the movement of matter is inertia. According to the principle of inertia, material bodies can move only if they are affected by something external. Living beings are not completely governed by external forces but are, at least to some extent, able to make own decisions concerning their own movements.

Descartes' idea was that the movement of an animal is reducible to the movements of its parts. Why does Kant so eagerly want to deny this thought? Kant was, after all, as little fond of immaterial principles in science as Descartes was, but in some circumstances Kant considered them necessary. One instance is explaining animal behavior. (*Träume* A 33–4; Naragon 1990, 15, 18–19.)

Here, a Cartesian could ask how can we know that the origin of the movement is really in an immaterial principle and not reducible to material movements. We cannot directly show that animals have representations, and we have no reason to assume animal minds since their behavior does not show any signs that would indicate the mental origin. Kant would probably answer this by an argument of analogy which he presents, for instance, in his *Critique of the Power of Judgment* (Ak. 5:464n.):

Thus, in comparing the artistic actions of animals with those of human beings, we conceive of the ground of the former, which we do not know, through the ground of similar effects in humans (reason), which we do know, and thus as an analogue of reason

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[...] Yet from the comparison of the similar mode of operation in the animals (the ground for which we cannot immediately perceive) to that of humans (of which we are immediately aware) we can quite properly infer *in accordance with the analogy* that the animals also act in accordance with *representations* (and are not, as Descartes would have it, machines), and that in spite of their specific difference, they are still of the same genus as human beings (as living beings).<sup>30</sup>

Also in Volckmann's lecture notes (Ak. 29:449), Kant argues against the Cartesian view of animals:

We call an animal *alive* because it has a faculty to alter its own state as a consequence of its representations. Someone who maintained that in animals the principle of life has no power of representation, but rather that they act only according to general laws of matter, was Descartes, and afterwards also Malebranche, but to think of animals as machines is impossible, because then one would deviate from all analogy with nature, and the proposition that a human being is itself a machine, is utter foolishness, for we are conscious of our own representations, and all natural science rests on the proposition: that matter can have *no representations*.

Since we know that we are able to change our behavior according to our representations, and since we perceive similar goal-directedness in animal behavior, we can conclude that they also act according to

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<sup>30</sup> It is worth mentioning that Spinoza expressed the same thought in 3P2 in the *Ethics*: "The Body cannot determine the Mind to thinking, and the Mind cannot determine the Body to motion, to rest or to anything else (if there is anything else)."

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representations. Representations are always mental and therefore require a soul in which they are inherent, so machines cannot have representations. The faculty of representation is the basis of internally determined movement. Without representations, movements would be without a conscious goal.

Even though Kant thinks that it is necessary that animals have souls, he is careful with inferences concerning the nature of animal souls. We can directly perceive only animal behavior. Inferences concerning the invisible grounds of animal behavior are possible only indirectly, through their visible consequences (behavior). In this way, we can never attain the same degree of certainty concerning animal minds as concerning our own minds, to which we have access through immediate experience. However, the idea that life cannot be explained through the properties of matter is more relevant to the issue of animal souls than this epistemic question. Descartes thinks that the movement of animals is not sufficient for ascribing souls and thinking to them, and that sensations are possible without a soul. For Kant, sensations have a representative function and they are not possible at the material level.

Sensible representations form the basis for all animal life and action by serving as necessitating stimuli. Representations awaken feelings of pleasure or displeasure and are thus connected to the will. This is the essence of life itself:

The *faculty of desire* is the faculty to be, by means of one's representations, the cause of the objects of these representations. The faculty of a being to act in accordance with its representations is called *life*. (GMS Ak. 6:211.)

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### 4.2. THE LOWER COGNITIVE FACULTY: SENSIBILITY

To be able to experience the external world and our own bodily states at all, the first requirement is the faculty of becoming affected through them. This passive capacity is sensibility. We can have perceptions only through senses. Kant (KrV A 19/B 33) defines sensibility as “[t]he capacity (receptivity) to acquire representations through the way in which we are affected by objects” or the faculty of intuition (K1, Ak. 28:240). Intuitions are singular representations (JL §1, 91; KrV A 42/B 59). Empirical intuition receives its matter from sensations that are caused by objects that affect the capacity of representation (KrV A 19–20/B 34).

Our intuition is always sensible and it always has an object that affects us in a certain way (KrV A 19/B 33; A 51/B 75). Time and space are the forms of our intuition, and in themselves pure intuitions; they contain nothing empirical. This means that we perceive everything necessarily spatially or temporarily, but things outside our perceptions are not necessarily in themselves spatial or temporal. Every human being has spatial and temporal intuition, but it is theoretically possible that there would be other kinds of intuitions.<sup>31</sup>

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<sup>31</sup> In his letter to Markus Herz written in February 1772 (Ak. 10:130), Kant presents an alternative kind of cognition. The cognition of the *intellectus archetypi*, God, is active and intuitive: the intuition of the archetypal intellect creates the objects. God has immediate cognition *a priori* of beings he has created. Our way of cognition is passive and discursive, that is ectypical: beings in themselves are independent from us but they affect us, and, thus, we can have sensible cognition *a posteriori* of them. (ibid.; KrV A 68/B 93.) The intuition of the *intellectus archetypi* of a certain object is a cause of the existence of this object in a way responding to the intuition of the intellect, whereas the intuition of the *intellectus ectypi* of the same object provides the existence of the object in question. The cognition of the *intellectus ectypi* is dependent of certain forms of perception (that is, the forms of intuition and the categories). The reason for this division is Kant's desire to illustrate that it is frivolous to presume that our representations would correspond to their objects, and that it is important to study the limits and possibilities of our intuition.

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Time and space are not properties of things in themselves, but they pertain to our way of perception. Our thoughts and feelings appear to us in a temporal order, whereas external objects are perceived temporally in space. Spatial perception is possible in a split second. The perception of time is possible only when we notice a change in the representation. This requires a certain unity of the experience and, in particular, of the subject. The perception of change, and temporal perception in general, is possible only if the representation  $r_1$  at the moment  $t_1$  and the changed representation  $r_2$  at the moment  $t_2$  are in the consciousness of the same subject and the subject is conscious of this.

Kant divides the senses into an outer sense that is directed to spatial objects, and an inner sense that is directed to temporal representations. The outer sense is a link to the external world. Through it, we can have impressions (such as sounds, smells and tastes) of the external objects. In humans, the outer sense consists of five organic senses (vision, hearing, feeling, smell and taste) and a vital sense, which concerns the overall state of the organism (such as irritation or joy). The amount and the accuracy of the organic senses is species specific. Also the degree of objectivity of different senses varies: feeling, vision and hearing are more objective than taste. (MM, Ak. 29:882.) There is more individual variance in taste perceptions than in visual perceptions.

Besides the outer senses, there is also an inner sense. Its object is the mind or the soul. Using introspection is using the inner sense. Visual perceptions are received through the outer sense but it is possible to think about a visual perception as an inner representation, that is, as an object of the inner sense. Representation as a modification of the mind



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can be an object of the inner sense, but the act of representing an external object is using the outer sense, since the represented object is external. When I look at the tea mug on my table, the mug is an object of the outer sense. When I focus my attention on the way I perceive the mug or the emotions it evokes in me, I use the inner sense. Outer senses deliver the matter for the inner sense: particular sensations are not objects of the outer senses but of the inner sense (L1, Ak. 28:271).

At the sensible level, there are not only representations of objects but also pleasure, suffering, desire and certain kinds of memory and anticipation. When we add the capacity to experience some representations as pleasant and others as unpleasant we get the foundation for action based on stimuli and motives. This alone is insufficient for goal-directed action. This only makes possible the tendency to linger with pleasant things and to get rid of unpleasant things. To be able to plan one's own action according to them (for example, to refrain from eating avocados if their taste has previously been terrible; or to go look for them if they are judged as a delicacy) one has to have memory and the capacity to associate and anticipate; that is, the capacity to bring or keep in mind a former representation that is not currently the object of sensation.

This capacity is the imitated cognition of the senses, which can be understood as a second order sensibility, is a formative power of the mind that does not require immediate contact with the object. This imitative power, or formative faculty (*facultas fingendi*), belongs to the faculty of sensibility (L1, Ak. 28:230, 28:235). The formative faculty is the basis for memory and association. It makes reproduction of the former perceptions possible. It can be further classified in subcategories, such as illustrative, imitative and anticipatory powers. (L1, Ak. 28:230–1.)

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I use the faculty of illustration when I complete an incomplete picture of an object in my mind. When, for example, I look at the front of a building, I cannot see the back of it. I do not take my perception of the building as a complete perception. Even though I do not see the whole building at once, I have no doubt that the building also has a back side. I picture its other side in my mind by using the faculty of illustration. I use the faculty of imitation, or reproductive imagination, when I call this representation of the building to my mind, even though I am not currently looking at a real building. In the voluntary use, this faculty is memory. The faculty of anticipation is at work when we plan things we are going to do. For example, if I am going to repaint the façade of a building, I can imagine the result beforehand by using this faculty, and use this mental picture as a model. (MM 28:585.)

To put all these pieces together: Through sensibility, we can become affected through temporal or spatial representations. We can have sense perceptions of outer objects and our inner states. Connected to the faculty of pleasure and the faculty of desire, sensible representations serve as motivations to action. However, empirical learning through association requires second order sensibility, the capacity to remember and anticipate representations that are not currently present.

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### 4.3. THE HIGHER COGNITIVE FACULTY: UNDERSTANDING AND REASON

The higher cognitive faculty consists of understanding and reason. Their function is to analyze and synthesize the matter provided by sensible intuitions and to make it discursive through concepts, judgments and inferences. Together with sensibility, understanding generates cognitions; hence the name “cognitive faculty”. The task of the higher cognitive faculty is thinking, that is, putting representations together in one consciousness. In *Prolegomena* (§ 22, Ak. 4:304), Kant writes that “[t]he business of the senses is to intuit; that of the understanding, to think. To think, however, is to unite representations in a consciousness.”

Kant (MM, Ak. 29:888–9) divides thinking into three kinds: 1) thinking through concepts in the understanding, 2) thinking through composition of concepts in the power of judgment, and 3) thinking through inferences in the reason. All these aspects of thinking are important in inference: Understanding represents the universal by forming a rule (which can be, for example, the definition of a human being). The power of judgment represents the particulars that the universal defined by the understanding contains; in other words, it judges, which object goes under which rule (for example, “Jacques-Yves Cousteau is a human being”). Reason derives the particular from the universal according to the principle, that what is true of the universal is also true of the particular subsumed under the rule (for example, “All human beings are mortal, Jacques-Yves Cousteau is a human being, therefore Jacques-Yves Cousteau is mortal.”). (MM, Ak. 29:889–90.)

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Intuition is a necessary part of cognition. We can know something about objects only through an intuition. Intuitions can be used as criteria for determining, what is correct and what is not. Cognition is based on an intuition that provides a link to its object. This object is thought in the understanding through concepts.<sup>32</sup> Moreover, the unity of apperception is needed for cognition. 'Cognition' is an elementary concept in Kant's doctrine of experience (as a meaningful unity). We can cognize only objects of possible experience. What is outside of experience is uncognizable. It is, however, possible to think about an object, whose possibility cannot be proven through experience or reason. In this case, we have a representation of this object but no cognition. (KrV B XXVIn.) The objects of cognition are given through intuition. Arbitrary speculation generates only representations, not cognitions, but it can itself be an object of intuition (and cognition).

Kant defines concept as "consciousness that the [same] is contained in one representation as in another, or that in multiple representations one and the same features are contained" (MM, Ak. 29:888), as "a representation as it is made into a rule" (Dohna, Ak. 28:672) and as "a universal [...] or reflected representation" (JL, Ak. 9:91). The logical form of concepts is generality (MM, Ak. 29:889). Understanding is an active capacity to think of the objects of intuition. Concepts are rules or forms, whose content is afforded by intuitions.

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<sup>32</sup> This view that presents intuition and concept as necessary components of a cognition can be challenged by referring to Kant's division of representation, the so called *Stufenleiter* (KrV A 320/B 377), where he says that a cognition is *either* an intuition *or* a concept. This view of cognition is prominent in the *Critique of Pure Reason*; elsewhere Kant also speaks of cognizing through intuitions (JL, Ak 9:33) or through concepts (for instance, JL Ak. 9:64–5). Cognition through intuition will be discussed in more detail in Chapter 5, Kant on animal experience. (For a detailed discussion on this topic, see Laiho 2012, 115–21.)

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The generation of concepts begins when we notice that there is sufficiently something similar in several representations. The generation of concepts consists of three phases: 1. *comparison* of representations, 2. *reflection* concerning the traits they have in common and 3. *abstraction* of the traits in which they differ. (JL, Ak 9:94.) This act generates a rule for thinking of the given object. Kant illustrates this through the concept of a tree. The process starts when we compare for instance a pine tree, a birch and an oak tree with each other and notice that they are different, but through closer reflection we see that they have something in common: they all have a trunk, leaves and branches. When, finally, all the different traits are abstracted from this, we get the concept of a tree, that is, a rule, through which we think about trees in general. (JL, Ak. 9: 94–5n.)

Our representations are subjected to the forms of intuition, time and space as well as the forms of understanding. Pure understanding is independent of sensibility. Categories, the concepts of the pure understanding, are the means through which we think about the objects of experience: once we have a manifold of intuition, the understanding analyzes it by applying categories to it.<sup>33</sup> In Kant's words,

[t]he same understanding, therefore, and indeed by means of the very same actions through which it brings the logical form of a judgment into concepts by means of the analytical unity, also brings a transcendental content into its representations by means of the synthetic unity of the manifold in intuition in general,

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<sup>33</sup> The table of categories is presented in KrV A 80/B 106.

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on account of which they are called pure concepts of the understanding that pertain to objects *a priori* [...] (KrV A 79/B 104).

When I observe an avocado, my understanding can perform the following operations: I can put the avocado on the scales to learn its weight, which is a totality of several (particular) grams (unity). I can see that the skin is dark green (reality), it is not red (negation) and it is a non-animal<sup>34</sup> (limitation). I also see that a lighter green color is inherent in the substance of the avocado and I know that the fruit grows on a tree (causality) and that it is edible and healthy (community). Finally, the avocado exists (existence), it is impossible that it would grow feathers (impossibility), and its particular size and shape are just contingent properties (contingency).

Now we can ask how pure concepts of the understanding can apply to appearances, which are of a completely different nature. Kant's answer to this is schemata. Briefly put, the task of schemata is to connect pure concepts of the understanding to the sensible objects. Kant (KrV A 140/B 179) describes a schema as "representation of a method for representing (A 141/B 180); "a rule of the synthesis of the imagination with regard to pure shapes in space" (ibid.); "the phenomenon, or the sensible concept of the object, in agreement with the category" (A 146/B 185). Schema is a mediator between sensibility and understanding, and it is

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<sup>34</sup> If I say that an avocado is not an animal, the act that my understanding is doing is negation. But if I say that the avocado is a non-animal, I am affirming that it does not belong to the class of animals, which does not in itself yet tell us much about avocados, just limits the concept, the sphere of the non-animality still being infinite. (See KrV A 72–3/B 97–8.)

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homogeneous with categories (by being pure) as well as appearances (by being sensible) (KrV A 138/B 177).

Appearances—or intuitions, individual images—are always variable and imperfect; and concepts are rules to think them. Schemata tell how to apply these rules. Let us look at Kant's (KrV A 141/B 180) example of the schema of a triangle: The concept of a triangle contains the necessary conditions for triangles. It is the rule to think about triangles in general and to discern them from other geometrical figures. However, to have the concept of a triangle I need to know the method of producing triangles. That method is the schema: it connects the concept of a triangle to its concrete instances. The schema itself is not entirely conceptual and not entirely sensible.

In the similar fashion, schemata work for empirical concepts. Kant (ibid.) also gives an example of the concept of a dog. First, there is the concept of a dog as “a rule in accordance with which my imagination can specify the shape of a four-footed animal in general, without being restricted to any particular shape that experience offers me or any possible image that I can exhibit *in concreto*.” The job of the schema is this specification. We do not have to pay any conscious attention to how we do it, and I do not even think that we could do that. The application of schemata happens automatically and unconsciously.

The essential difference between schemata and concepts is that to use schemata one does not need to be aware that one is acting according to a rule that one has set oneself. The essence of the understanding is the capacity to set rules, and these rules are concepts. For example, the

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concept of a tree is a rule that tells the criteria for objects to which this concept can be applied. The concept of a tree does not, however, have any perceptible properties. I cannot draw a picture of my concept of a tree; the concept does not look particularly like anything. Nevertheless, I am able to recognize trees when I see them. This recognition is made possible through schemata.

Reason “is the faculty of deriving the particular from the universal” (KrV A 646/B 674) or “the faculty of principles” (KrV A 299/B 356, emphasis removed). External objects are the object of the sensible intuition, and sensible intuition is the object of understanding. Similarly, understanding is the object of reason. Understanding generates concepts by unifying the manifold of the objects; reason organizes concepts by unifying the functions of the understanding. Reason operates through syllogisms. (KrV A 304/B 361). In its logical use, reason applies the rules of syllogisms to judgments, and since it aims at the greatest generality possible, the conclusion is also generalizable. In this way, reason seeks “to bring the greatest manifold of cognition of the understanding to the smallest number of principles (universal conditions), and thereby to effect the highest unity of that manifold” (KrV A 305/B 361).

Reason also has a pure use where it operates only with abstract conditions by proceeding in the series of conditions until the idea of the unconditioned, of which we do not have a corresponding intuition. It is just an idea of reason that does not refer to anything objectively real. Just as categories are products of the pure understanding, transcendental ideas are not concepts of objects but creations of the reason itself. (KrV A 643–4/B 671–2.) There are three classes of ideas: 1) “the absolute



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[...] unity of the thinking subject", 2) "the absolute unity of the series of conditions of appearance" and 3) "the absolute unity of the condition of all objects of thought in general" (KrV A 334–5/B 391–2, emphasis removed). The ideas of reason are perfect and unlimited, whereas the objects of intuition are always tied to a limited perspective.

To sum up, the higher cognitive faculty is responsible for thinking; that is, uniting representations in a consciousness. The higher cognitive faculty operates with concepts. United with an intuition, a concept generates cognitions. Schemata serve as the link between intuitions and concepts. The pure forms of the understanding define everything we conceptualize. Reason is responsible for organizing concepts, and in its pure use it generates transcendental ideas that we never can validly affirm nor deny due to the lack of the corresponding intuition.

#### **4.4. FROM RECEPTIVITY TO THE PERCEPTION OF SPATIO-TEMPORAL OBJECTS**

If all we had in mind were the representations provided by the present moment, our experience would be very restricted. We would not be able to act, only to react. For experience to be meaningful, we need the capacity to reproduce representations. Imagination is a sensible capacity that is attributed also to animals, and its contribution to experience is huge. In this chapter, I will explain what exactly this contribution to experience consists of. This equips us with important building blocks of animal experience that will be discussed in Chapter Five.

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Imagination is a sensible capacity that is responsible for reproduction. Kant defines it as “the faculty for representing an object *without its presence* in intuition” (KrV B 151). Kant’s imagination is not to be equated with fancy as the capacity to think about make-believe issues and to invent novel things. Instead, imagination is a necessary part of sensible experience. It makes the necessary components of learning and intentionality possible: memory and anticipation. Time is a necessary element in imagination: reproduction is not possible in a split second. For me to be able to reproduce a representation, I need the capacity to keep that representation in my mind from one moment of time to another, that is, I need memory. Imagination is a sensible faculty since it deals with sensible representations (ibid.).

Is not sensibility as receptivity enough for experience? For Kant, the answer is no. Senses provide only input from the world or one’s body (as feelings or sensations), and they do not need to be conscious for the subject to be able to act on them. A machine that is sensitive to some features of the environment fulfils this criterion; and hardly anyone wants to claim that machines were experiencing something. This is also how the Cartesian animals function, according to the standard interpretation. In this case, the act of chasing a ball could be presented like this:

The subject S has this representation over and over again in the following way (the t’s are different moments of time and the s’s different spatial locations):

t1: the ball is in s1, I go and chase it

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t2: the ball is in s2, I go and chase it

t3: the ball is in s3, I go and chase it

S does not need to have any memory of the past and no idea of the future. She is not able to plan the act of chasing the ball, nor even make the decision to chase it. The representation of the ball affects her senses so that it forces her to chase it. S just reacts to the current stimuli without the representational baggage of the past or expectations of the future. In this case it hardly makes any sense to talk of S's experience. S could be a machine that is programmed to respond to one environmental clue. I claim that this is not Kant's idea of animal experience.

I argue that the Kantian animals are capable of action that is not a mere mindless reaction to stimuli but that has empirical integrity. Let us see how this affects the example of chasing a ball. Unlike in the former case, where the situation was always new for S, the capacity for temporal perception makes also her object consciousness capable of temporal extension. She does not need to make the decision of chasing the ball each and every moment; it is enough that she makes it only once. She remembers where the ball was a moment ago, and can anticipate the direction in which the ball is going to move. In this case, she has the ability to temporal perception but not necessarily any idea of herself as a subject.

In this latter case, the mental capacities that S has, besides outer sense, are inner sense and a sensible imagination. Let us first concentrate on the inner sense. The objects of the outer intuition are spatial appear-

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ances, things we perceive in space. Now, these appearances, or mental states, can be further observed in the mind through the inner sense. Kant describes inner sense as the capacity “by means of which the mind intuits itself, or its inner state” (KrV A 22–3/B37). Inner sense can be understood as awareness of the content of one’s mind. In other words, inner sense makes the objects of outer intuition subjective objects; feelings, emotions, volitions and other representations of one’s state are also included among them. (See also Allison 1983, 261.)

Kant also describes inner sense as “a determinate form, under which the intuition of its inner state is alone possible, so that everything that belongs to the inner determinations is represented in relations of time” (KrV A 22–3/B37). This means that we perceive things as temporal when we are using the inner sense (through the outer sense, we perceive things as spatial). For S to perceive the movement of the ball she is chasing, she has to be able to keep in mind the past locations of the ball and to notice that the location changes. If there is absolutely no change in our representations, there are no temporal relations on the basis of which we could have a sense of time. We lose the sense of time when we are unconscious or asleep.

What I have been describing here can also be put in terms of syntheses. Kant’s problem in the A-deduction is how it is possible that our *a priori* concepts apply to objects of experience, and how we can relate to them and make objective judgments concerning them. His solution is that this happens through three syntheses: the synthesis of apprehension in intuition, synthesis of reproduction in a representation of imagination, and synthesis of recognition in a concept. The act of collecting or uniting is

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common to all of them. The first two syntheses occur together; the third one requires the first two (KrV A 102). In the latter case of perceiving the ball, the first two syntheses are at work.

The first synthesis, the synthesis of apprehension in intuition, collects the elements of perception together and unites them. Kant describes it as follows:

Every intuition contains a manifold in itself, which however would not be represented as such if the mind did not distinguish the time in the succession of impressions on one another; for as contained in one moment no representation can ever be anything other than absolute unity. Now in order for unity of intuition to come from this manifold (as, say, in the representation of space), it is necessary first to run through and then to take together this manifoldness, which action I call the synthesis of apprehension, since it is aimed directly at the intuition, which sure provides a manifold but can never effect this as such, and indeed as contained in one representation, without the occurrence of such a synthesis. (KrV A 99)

In the empirical use, this synthesis runs through the manifold of our representation contained in each moment, being some kind of a preparatory analysis or inventory of it without yet identifying its content. My visual field is very restricted. I need time to be able to represent for example Turku Cathedral: I might first look at its lower part, then at its roof and finally at its tower. Also these parts can be further divided into simpler elements. Finally I collect all these representations together. This preliminary inventory of perception is the synthesis of apprehension.

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The same act of collecting happens when S concentrates on chasing the ball.

Since the first synthesis requires time, it would not be possible without the capacity of keeping past representations in the mind. In other words, it goes together with the second synthesis, the synthesis of reproduction. This synthesis takes place at the level of imagination. It seeks consistencies among the variable representations and makes association possible. In Kant's words,

[I]n accordance with [the empirical law of reproduction] representations that have often followed or accompanied one another are finally associated with each other and thereby placed in a connection in accordance with which, even without the presence of the object, one of these representations brings about a transition of the mind to the other in accordance with a constant rule. (KrV A 100)

Appearances are also subject to this rule. For example, if avocados kept constantly changing their form and color, I would not be able to associate certain shades of green color with its flesh; or if the referent of the word 'avocado' changed, I would not know what kind of objects would be evoked by this word. Here, the imagination reproduces representations that have been received earlier through the senses.

When I cut ripe avocados in half, I have noticed, in successive intuitions, that inside the avocado, there is yellow-green flesh surrounding a large, brown seed. Due to my reproductive imagination, I always anticipate this when I cut an avocado in half. I cannot, in one intuition, repre-

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sent the same avocado as whole and as cut in half. For me to associate the representation of the flesh of the avocado with the representation of the avocado as a whole, I need to keep the representations of the avocado in my mind from moment to moment as I cut it in half. Otherwise I would have only scattered representations that have no unity over time.

#### **4.5. FROM PERCEPTIONS TO JUDGMENTS**

Now we know how sensorial inputs are transformed into spatio-temporal perceptions. What still needs to be explained is how these perceptions can be expressed in judgments. There is also the question, what this mind or the subject is where all the collecting or uniting of the syntheses happens. To be able to keep something in the mind for a later use, a fundamental experience of subjectivity is required. At the sensible level, inner sense is responsible for this subjective identity. For judgments to be possible, the unifying aspect of the syntheses culminates in the third synthesis and personal identity as transcendental apperception arises. For the part of experience, this opens up new depths of subjectivity as issues of moral responsibilities and personal development arise.

The observation of one's mental states through the inner sense can be quite complex. For example, I may notice that the fatigue and apathy I felt a moment ago have turned into joyful zest after drinking a cup of refreshing tea with a friend while participating in an a lively discussion. This kind of self-reflection is not possible only through a capacity of external and internal sensibility. What it further requires is self-

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consciousness as the idea of unity of *my* experiences and *my* consciousness; that is, a representation of the “I”. Kant calls this “transcendental apperception”.

This consciousness of being the subject of one's representations is not necessarily required in simpler uses of the inner sense. For example, if a dog is waiting for his master to give him a command to fetch a ball, he can do this quite well without having any idea of himself as a subject. This can also be described as an instance of apperception, but only of empirical apperception, which is a synonym for inner sense: “[t]he consciousness of oneself in accordance with the determinations of our state in internal perception is merely empirical, forever variable; it can provide no standing or abiding self in this stream of inner appearances, and is customarily called *inner sense or empirical apperception*” (KrV A 107)<sup>35</sup>

Let us now look at the concept of apperception. For my purposes it is sufficient to give a general outline of the transcendental apperception since its function for my topic is just to demonstrate the kind of consciousness animals do not have, according to Kant. The relevant parts of the earlier example of me noticing my mood change can be represented

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<sup>35</sup> Since apperception is very close to the inner sense, it is easy to confuse these concepts. Even Kant does not use the term ‘inner sense’ consistently. In his pre-critical writings (for example L1, Ak. 28:276), he relates it closely to transcendental apperception and denies it from animals; whereas in his critical philosophy he uses it in a cognitively less demanding sense, as a part of sensibility. In *Critique of Pure Reason* (B 153), Kant clearly explicates how his use of these two terms is different from their traditional use: “It is customary to treat *inner sense* as the same as the faculty of *apperception* (which we carefully distinguish).” In this sense, as consciousness of mental states, there are no problems related to transcendental apperception in attributing inner sense also to animals (see for example KrV A 107).



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as follows (the drinking of the tea and the conversation with my friend takes place between R2 and R3):

(R1) I am tired.

(R2) I do not feel like doing anything.

(R3) I feel inspired.

(R4) I feel happy.

During this set of representations I go through a change. Now, this change from apathy to inspiration is huge, I am hardly the same person when I am inspired and happy as when I was tired and low on energy. Still, there is something that has remained constant through all change, and that is my self; not only myself as a physical being but as a mind, as an experiencing subject. This 'I' is quite abstract: I cannot perceive it though the senses; still it accompanies every thought and every mood I go through. It is expressed in the sentence "I think". Kant describes it as "that self-consciousness which, because it produces the representation I think, which must be able to accompany all others and which in all consciousness is one and the same, cannot be accompanied by any further representation" (KrV B 132). Thoughts without transcendental apperception are nothing to *me*; I cannot think of them as my own thoughts. Without apperception, R1, R2, R3 and R4 would be separate representations that do not form a whole for anybody. They would not be inherent in one consciousness.

The transcendental apperception is also needed in forming judgments. It gathers the parts of a judgment together thereby making it possible. The

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judgment “An avocado is green” is possible only if the subject “avocado”, the copula “is” and the predicate “green” are being thought in the same consciousness. If one subject is thinking about an avocado, another about the relation between subject and predicate and the third one about greenness, these scattered thoughts do not form a unified judgment.

We would not be able to think about the greenness and the avocado in different relations to each other, and would not be able to form complex thoughts. The sentence “I think” expresses the transcendental apperception, and it has to be possible to attach it to all representations for them to be my thoughts. This means that to form a judgment I must recognize my representations as my own thoughts. Otherwise they would be scattered, disconnected from each other, and I would act blindly, driven by them.

The consciousness of representations arises when we move from the realm of the outer sense to the inner sense. Self-consciousness emerges when we move further to the transcendental apperception, as we become aware of the uniform subjectivity of our representations; that is, when we realize that they all are *my* thoughts; they all are accompanied with the quantifier “I think.” For Kant, apperception is more than mere awareness of representations (which is the sense that Leibniz, among others, used the term). It is the foundation for the experience of subjectivity. There can be object consciousness without apperception but not without inner sense. The leap from sensibility to apperception is a leap from passive receptivity to active thinking (see also Rosenberg 2005, 116).

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The conceptual identification of objects comes into play at the third synthesis, the synthesis of recognition. As Kant puts it, “[w]ithout consciousness that that which we think is the very same as what we thought a moment before, all reproduction in the series of representations would be in vain” (KrV A 103). This recognition, or identification, of the object of thought occurs through concepts, which are rules of the unity and identity of objects. This is where transcendental apperception steps in. It is the root of all unity and permanence. It is the “pure, original, unchanging consciousness” and is the condition for all experience. (KrV A 107).

On the subjective side, we have the transcendental apperception that makes concepts—and thereby cognition of objects—possible. It is the foundation that collects the manifoldness of representations together and gives them identity by uniting them in one consciousness. On the objective side, there is the transcendental object:

Appearances are the only objects that can be given to us immediately, and that in them which is immediately related to the object is called intuition. However, these appearances are not things in themselves, but themselves only representations, which in turn have their object, which therefore cannot be further intuited by us, and that may therefore be called the non-empirical, i.e., transcendental object = X. (KrV A 108–9)

This transcendental object provides the relation to objects and enables them to have objective reality and unity, even though the ways they are represented are temporal and not uniform.

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In the B-deduction, Kant emphasizes the role of the *I think* (*Das Ich denke*) in the transcendental apperception:

The *I think* must *be able* to accompany all my representations; for otherwise something would be represented in me that could not be thought at all, which is as much as to say that the representation would either be impossible or else at least would be nothing for me.

Intuitions, therefore, are not yet anything *to me* in this sense if they are not accompanied by transcendental apperception. The moral of these two elements of the third synthesis is that for temporal experience to be possible, we need twofold unity: the unity of the consciousness and the unity of the object.

The three syntheses explain how we proceed from singular perceptions to an idea of relations between objects and finally to conceptual cognition and the idea of a transcendental subject and a transcendental object. For my purpose it is important to notice that only the third synthesis requires higher cognitive faculties. Thus, the role of sensibility in experience is dominating. Understanding enables only cognition and judgments, but its contribution to experience as such is minor.

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### 4.6. THE FACULTIES OF PLEASURE AND DISPLEASURE AND OF DESIRE

As the cognitive faculty determines what kinds of representations we can have, the faculties of pleasure and displeasure (from now on: faculty of pleasure) and of desire determine our orientation and goals. They can be seen as the principles of action of an individual. Our desires define what we strive toward, and that is something that we find pleasurable or rewarding. These two faculties are closely linked to each other and to the cognitive faculty. The cognitive faculty provides representations for us; the faculty of pleasure serves in determining the objects of the faculty of desire through discerning what is desirable or avoidable.

The concept of agreement appears in Kant's various definitions of pleasure. In the *Critique of the Power of Judgment*, pleasure is described as "[t]he consciousness of the causality of a representation with respect to the state of the subject, *for maintaining* it in that state" (KU 5:220) and as "[a] *state* of the mind in which a representation is in agreement with itself, as a ground, either merely for preserving this state itself [...], or for producing its object" (KU 20:230–1). In the *Critique of Practical Reason* (Ak. 5:9n), Kant describes it as

the representation of agreement of an object or of an action with the subjective conditions of life, that is, with the faculty of the causality of a representation with respect to the reality of its object (or with respect to the determination of the powers of the subject to action in order to produce the object). (Emphasis removed)

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The agreement with the subject is the feeling that “this suits me.” We wish to maintain, acquire or produce things or states that agree with us. Pleasure has many forms depending on the cognitive faculty on which it operates. It can be animal, human or spiritual. The characteristics of each of these forms are shown in Table 2.

**Table 2.** The kinds of pleasure. (L1, Ak. 28:248, 250; MM, Ak. 29:891, 293; L2, Ak. 28:586.)

<b>Kind</b>	<b>Instrument</b>	<b>Object</b>	<b>Act</b>	<b>Instrument</b>
<b>Animal</b>	Private senses	agreeableness/ disagreeableness	gratification, private satisfaction	sensation
<b>Human</b>	universal sense	beauty/ugliness	general pleasure	taste
<b>Spiritual</b>	pure concepts of the understanding	goodness/evil	approval	reason

Pleasure can be subjective or objective. It is subjective when its object agrees with the subject, and objective when the object agrees with a universal judgment. The taste of avocados is agreeable for me but my son does not like it. Our subjective constitutions are different in this case. When he grows old enough to discuss moral questions, I am sure that we will agree that it is a better choice to buy fair trade avocados, even though we still might disagree on the taste. The good necessarily pleases everybody, which is not the case with beauty, which conforms to the laws of sensibility (L1, Ak. 28:248). The distinction between the agreeable and the disagreeable is possible without understanding. Recognizing beauty provides both understanding and sensibility, and it

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is possible only for rational beings that also have sensibility; that is, for humans. We do not see the good through senses; we perceive it through the understanding. (L2, 28:586.)

Pleasure, in all its forms, is the goal of the faculty of desire: we desire what we find agreeable, beautiful or good, and we avoid the opposite. By the faculty of desire, Kant (KpV, Ak. 5:9n) means the “faculty to be by means of its representations the cause of the reality of the objects of these representations” (emphasis removed).<sup>36</sup> When I want guacamole, I have the representation of guacamole in my mind. This might lead me to acquire the ingredients to realize my representation. Striving to realize the object of representation is an essential element of desire. If there is no kind of striving included, there is not really a desire but only a wish or an idle desire, whose object is not within the subject’s control (such as the desire to see a comet) (L1, Ak. 28:254; MM, Ak. 29:895). The power of free choice (*freie Willkühr*) is an active power to choose whether to act or not to obtain a certain goal (L1, Ak. 28:254; L2, Ak. 28:587). Each choice has always an impelling cause. If this cause is sensible and subjective, it is called a stimulus or impulse; if it is intellectual and objective, it is called a motive. (L1, Ak. 28:254–5, MM, Ak. 29:895; L2, Ak. 28:587, 28:677.)

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<sup>36</sup> Kant discusses this definition further in his *Critique of Judgment* (5:177–8 n).

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The faculty of desire can be divided into three kinds just like the faculty of pleasure (Table 3):

**Table 3.** Kinds of faculty of desire. (L1, Ak. 28:255; MM, Ak. 29:895.)

Kind	Impelling cause	Act	Instrument
<b>Lower animal</b>	necessitating stimulus	not free	sensibility; agreeableness
<b>Lower human</b>	impelling stimulus	free	sensibility
<b>Higher</b>	motive	free	understanding

Freedom distinguishes human power of choice from animal power of choice: animal action is determined through sensible stimuli, human power of choice is free despite some exceptions (such as little children and some mental patients). (L1, Ak. 28:255.) In its lower form, the relevant judgment has the form, “this is nice”, and it is always determined by the current contextual circumstances. In its higher form, the relevant judgment has the universal form, “this is good”.

Hunger is a good example to demonstrate how these levels of the faculty of desire work. The lower animal desire for food leads to eating—provided that proper food is available—with no real possibility of choice. The subjective state of hunger makes proper food appear as agreeable and desirable. In this case, there is no freedom of choice. Now, if I am hungry and there is a chocolate bar and a carrot available, I might find it more tempting to choose the chocolate bar. If I do the decision based



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on my sensible wants, I choose it. If I take a moment to reflect on what would be a wise choice, I choose the carrot, since it is healthier. The contribution of reason is the capacity to assess the motives one is acting on regarding the ends pursued by the subject.

#### **4.7. CONCLUSION: THE INGREDIENTS OF EXPERIENCE**

Let us now put all the above pieces together. To be alive; to be able to determine one's own movements, what is needed is a mind or a soul equipped with sensibility as the subject of representations. Mere singular sensible intuitions of objects only enable unconscious reactions to stimuli. The ingredient that makes it possible to speak of experience in the first place is the capacity to reproduce representations and to retain past representations in the mind, that is, imagination. So far we are operating with sense perceptions; and together with the capacity of association provided by imagination, they constitute phenomenally conscious experience even without the conceptual interference of the higher cognitive capacities.

If the subject realizes that her representations appear in her consciousness, which remains the same through all the change of the representations, she has transcendental apperception. This is no longer a sensible capacity, and lifts the consciousness to a new level, to consciousness of the self. Also concepts and judgments now become possible. The subject has the idea of an object in general; it remains constant throughout all changes. Now, it is possible for her to move from the level of the singu-

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lar representations to the level of general representations; and to conceptually connect representations in one's consciousness to form judgments concerning the relations of things. Her understanding operates according to its pure forms, the categories; and for them to be applicable to sensible objects which are of a completely different nature she uses schemata that guide her in their correct application.

Only a being that has understanding and reason can have personal ends in life that serve as motivation of action and thus enable conscious choice. The essence of these ends is happiness and a good life; they are about what it is to be a good human being and to lead a good life. It is not about sensible pleasure but deeper contentment.

In *Critique of Pure Reason* (A 805/B 833), Kant condenses the interests of reason in three questions: "1. *What can I know?* 2. *What should I do?* 3. *What may I hope?*" Kant's answer to the first two questions is, "*Do that through which you will become worthy to be happy*" (KrV A 808/B 837). The way to happiness is through morality (A 814/B 842).<sup>37</sup> Having ends for the personal development in life affects the way in which things are experienced; or rather, how experiences are valued. A sensible pleasure can be largely reduced if the subject acknowledges that it results from selfish motives that speak for the low moral nature of the subject in that it manifests that her reason and will are weaker than her animal impulses. All this requires the capacity to form judgments.

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<sup>37</sup> Kant's view of morality will be discussed in detail in Chapter 6.3.

#### ***4. Kant's view of the constitution of experience***

These high moral ends are something that certainly are lacking in animals—in Kant's view, at least—but what is the real contribution of these higher faculties to experience? That is, what can experience be without understanding and reason, in the realm of mere sensibility? And what is the moral worth or, in general, the moral consequences of such experience? These questions will be discussed in the next two chapters to answer the question: What is sensible experience?

## *5. Kant on animal experience*

### **5. KANT ON ANIMAL EXPERIENCE**

After laying out the building blocks of experience in the previous chapter, we know the context in which Kant is operating when he discusses animal minds. In this chapter, my aim is to see what kind of experience emerges when blocks that require higher cognitive capacity are omitted. I will concentrate on the question, what kind of experience is possible if we omit conceptual capacities and self-consciousness. To conclude, I will discuss the differences between the Cartesian and the Kantian view of animals. Why was it so important for Kant to attribute a soul to animals?

Three things concerning Kant's approach to animal minds should be clear before we start. First, animals only have the lower cognitive capacity, sensibility; and not the higher ones, understanding and reason. Secondly, it follows from this that the difference between animal and human minds is a difference in kind, but of a different type than in Descartes' view. Descartes regards the difference between humans and animals as a substantial difference: humans are constituted of two substances, matter and spirit, whereas animals are material beings with no spirits. In Kant's theory, animals certainly have minds, but their minds are different from human minds; and they remain like that no matter how much they would develop their skills. Generating a completely new kind of faculty cannot happen just by developing the existing skills. (L1, Ak. 28:276; L2, Ak. 28:594; Dohna, Ak. 28:690.)

Thirdly, Kant's problem of animal minds is hypothetical. We cannot have a cognition concerning animal minds since we cannot have an

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intuition of it. We cannot directly access animal experience; we can only construct theories of what it possibly is like given what we know about animal behavior and physiology. Kant is convinced that the lower mental capacities he ascribes to animals are sufficient to explain all animal behavior (MM, Ak. 29:906).

Kant is not interested in arguing for the objective reality of his view.<sup>38</sup> Kant's interest in animal minds is to be seen as a part of his project of the thorough analysis of the human mind, which culminates in his three Critiques. The main function of animals in Kant's philosophy is to serve as examples of beings restricted to sensibility, through which the functions of all three faculties of the (human) mind can be illuminated. The Kantian philosophy of animals is rather a philosophy of animality in humans, even though Kant also claims that sensibility is all we need to explain animal behavior.

A good introduction to Kant's view of animal experience is a quotation from his letter to Markus Herz on May 26th 1789 (Ak. XI:52). There, Kant writes about what it might be like to be an animal:

I would not even be able to know that I have sense data; consequently for me, as a knowing being, they would be absolutely nothing. They could still (I imagine myself to be an animal) carry on their play in an orderly fashion, as representations connected

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<sup>38</sup> Whether Kant's view on the cognitive capacities of animal minds is objectively correct or not is not relevant. Kant's claims apply to beings that have sensibility but not understanding or reason and, as far as Kant knows, animals can be conceived as such beings. However, the accumulating scientific knowledge concerning animal experience can make a difference in Kant's animal ethics: if it can be reliably shown that some nonhuman species have higher mental capacities, it follows that they should be treated as ends in themselves.

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according to empirical laws of association, and thus even have an influence on my feeling and desire, without my being aware of them (assuming that I am even conscious of each individual representation, but not of their relation to the unity of representation of their object, by means of the synthetic unity of their apperception). This might be so without my knowing the slightest thing thereby, not even what my own condition is.

Here, Kant mentions the following features of animal mentality: 1) there are no conceptual representations; 2) the only principle of connection is association; 3) representations have affective force; and 4) there is no self-consciousness. A further issue that he does not discuss here but that follows from all this is that animals have no free will, which has remarkable consequences on moral issues that are the topic of Chapter 6.5. The first three features are related to the imagination. In the following, I will look at these issues from two points of view: first, through the operations of the sensible imagination; and secondly, laying focus on different senses of consciousness.

The common way to interpret Kant's view of animals renders it similar to the standard interpretation of the Cartesian view of animals as mechanistic beings with no relevant experience (see, for example Naragon and Kemp Smith) whereas some authors (such as Hanna and Laiho) argue that there is more to animal experience in the Kantian context than mere automatic, unconscious reactions to stimuli. My interpretation belongs to this latter category. I want to show that the non-conceptual experience of animals can, in many respects, be very close to our way of experiencing things.

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In particular, my focus will be on the fictive faculty of animals to see, what kind of representation they can have when sensibility is combined with the fictive faculty. The fictive faculty of animals has not been discussed much so far, and most of the discussion concerning animals in Kant's philosophy has concentrated either in the restrictions of their minds or their moral status, leaving aside the possibilities of animal representations. Being restricted to sensibility does not mean relying completely on the mercy of flowing sensations, but also enables the reproduction and anticipation of representations, which is no longer so far from conceptual cognition.

### 5.1. THE ANALOGUE OF REASON: FROM RECEPTIVITY TO COMBINATION

Kant often (for example, in MV Ak. 28:450, L2 Ak.28:594, Dohna Ak. 28:690,<sup>39</sup> KU Ak.5:464n) refers to the analogue of reason in animals. By this, he means the principle of action in animals that is based on sensibility but which could well also be explained through reason. In this chapter, I will focus on the function of this analogue of reason—that is, the sensible principles of association by means of which animals can remember, anticipate and learn—and its contribution to experience in contrast to reason. In Kant's terms, the focus will be on the faculty of imagination in animals.

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<sup>39</sup> The passages from Kant's lectures of metaphysics are based on Baumgarten's *Metaphysics*, and do not as such necessarily reflect Kant's own view. However, Kant seems to have adopted the idea of animals as analogues of reason to his own thinking since he also uses it in his critical philosophy.

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I will start by looking at Kant's argument against the higher cognitive faculties in animals, and will do this by showing how Kant refutes Meier's argument for them. Even though Kant's definition of animal minds as equipped only with sensibility is only hypothetical, he had good grounds for it. In the second subchapter, the focus is on a nonconceptual combination of representations, and the difference between a combination through association and a combination through concepts.

### **5.1.1. Receptivity: sensible representations**

Animal minds are dependent on the body and restricted to sensibility. This means that they are able to perceive their environment through their senses and act in it according to representations, but they are unable to reflect them as objects of the inner sense, to differentiate between the contribution of their own minds and the information provided by the environment, to deliberate on the relations between the objects of their perceptions—not to mention mathematical or metaphysical problems that are independent of everything empirical. In other words, animals are not aware that the representational content of their minds is representational.

Human minds are connected only to the body, and they are equipped also with higher cognitive faculties which make the soul autonomous by being the means to detach from the limitations of the body, to which sensibility is inseparably attached (L1, Ak. 28:274, MM, Ak. 29:878). Sensibility links the mind to the body. It is the capacity to become



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affected through the sense organs. As rational animals, humans are capable of conceptual and abstract thinking independent from empirical intuitions. Such thinking is free, and Kant thinks that it raises humans above animals, making us autonomous agents (MS, Ak. 6:355).

An example of the difference between a non-conceptual intuition and discursive intuition is in *Jäsche Logik* (Ak. 9:33):

If a savage sees a house from a distance, for example, with whose use he is not acquainted, he admittedly has before him in his representation the very same object as someone else who is acquainted with it determinately as a dwelling established for men. But as to form, this cognition of one and the same object is different in the two. With the one it is *mere intuition*, with the other it is *intuition and concept* at the same time.

The important thing is that the capacity of perception is separate from the capacity of understanding but not from consciousness: both non-conceptual and conceptualized perceptions can be conscious. Understanding only adds the classification of the perceived object, the ability to form the judgment “That is a house.”

To set the stage for Kant to argue against, let us look at an argument for conceptual capacities in animals, presented by Georg Friedrich Meier (1718–1777) in his *Seelen der Thiere*.<sup>40</sup>

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<sup>40</sup> Meier was Baumgarten’s pupil and successor at the University of Halle. He mainly worked with aesthetics and hermeneutics. Metaphysics and theology are main themes in his works but he also discussed other topics such as literature and animal psychology. (Roback 1970, 321; Makkreel 2006, 522–3.)

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This is the argument Kant argues against in *False Subtlety*. Meier's argument runs like this: Since a cow (which Meier, to add force to his argument, considers a particularly stupid animal) looks at the new door of her stall with astonishment, she must be able to discern it from the old one. Had the cow only confused sensations, she would not be able to see the difference between the two doors. To notice the difference, the cognition must be distinct.<sup>41</sup> According to Meier, this means that the cow has understanding, which is the faculty that generates distinct representations. (Meier 1749, § 32, 69.)

Meier argues that animals can have the first two degrees of the understanding (which has altogether four degrees, the last two operating at the abstract level). The first degree of the understanding makes the contents of the mind distinct so that they can be distinguished from one another; and enables cognizing singular things among the stream of sense-data. Singular judgments become possible in the second degree of the understanding, which provides that there is at least one distinct representation in the mind. (Meier 1749, § 32–3, 69–70.) At this level, it is possible to

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<sup>41</sup> According to Meier's theory of representation, a representation is either clear or unclear. By a clear representation Meier simply means a conscious representation. (Meier 1749, § 31, 66–7) Clear representations are always thoughts, and thoughts are always conscious. (Meier 1752b, § 154, 182–3). A clear representation is either distinct or confused. A representation is distinct when it can be distinguished from other representations, otherwise the representation is confused. (Meier 1749, § 31, 66–7.) A confused cognition is a cognition of a whole but not of its parts (for example, a cognition of a person who is far away so that we cannot discern her face) whereas distinct cognition includes also the parts (for example, a cognition of a person who is near us so that we can clearly see her face) (Meier 1752b, § 28, 28–9, § 168, 215). For Meier (1952a, § 13, 4), a representation is conscious “as far as we distinguish it and its object from other representations and things” (“In so ferne wir sie und ihren Gegenstand von andern Vorstellungen und Sachen unterscheiden”. My translation). Meier compares consciousness with a light that helps us to distinguish between things.

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form the judgment that can be expressed in the sentence “this avocado is green”, whereby the subject and the predicate of the judgment are particular, not yet universal concepts. The word ‘avocado’ refers to the particular avocado (which does not have to be cognized as an instance of the class of avocados), and ‘green’ refers (in this case) to the particular color of the avocado.

In summary, Meier’s argument for understanding in animals goes like this:

1. If S can tell the difference between A and B, S has distinct representations.
2. If S has distinct representations, S has understanding.
3. Animals can tell the difference between A and B.
4. Therefore, animals have understanding.

Kant argues that the proposition 2 is false, and therefore the conclusion does not follow. Kant’s argument in *False Subtlety* (Ak. 2:59) suits well to refute Meier’s argument for the conceptual capacities of animals:

This argument runs like this: an ox’s representation of its stall includes the clear representation of its characteristic mark of having a door; therefore, the ox has a distinct concept of its stall. It is easy to prevent the confusion here. The distinctness of a concept does not consist in the fact that that which is a characteristic mark of the thing is clearly represented, but rather in the fact that it is recognized as a characteristic mark of the thing. The door is

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something which does, it is true, belong to the stall and can serve as a characteristic mark of it. But only the being who forms the judgment: *this door belongs to this stable* has a distinct concept of the building, and that is certainly beyond the powers of animals.

A representation is clear if all of its characteristic marks are to be distinguished. If not, the representation is obscure. When I look at the Andromeda Galaxy, I also represent an individual star belonging to the galaxy—let us call it Twinkle—since it is impossible to represent the galaxy without representing its components. However, I am not able to discern individual stars from the galaxy, no matter how hard I try. My representation of Twinkle is obscure; I represent it without knowing that represent it. (I can, however instrumentally get a clear representation of Twinkle, if I look at it through the Hubble Space Telescope.) Similarly, the ox surely can clearly see the door of its stall, and thereby have a clear representation of it. This all takes place at the sensible level and does not amount to judgment concerning the content of the representation, which would require understanding even though these representations are necessary conditions for such a judgment.

Kant and Meier do not disagree about what happens in the mind of the animal, or what the experience of the animal is. They disagree about what it is to have understanding and concepts and to be able to judge. For Meier, abstract reasoning is not necessarily needed for concepts; for Kant it is. What Meier sees as a judgment formed by the cow in the understanding, is for Kant only discernment through association at the sensible level. In concepts and judgments (which are combinations of concepts), abstract reasoning is always needed, sensibility alone will not do.

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To sum up, Kant's argument against conceptual capacities in animals goes like this:

1. If S can compare, reflect and abstract, S has the capacity to form concepts.
2. If S has the capacity to form concepts, S has understanding.
3. Animals cannot compare, reflect and abstract.
4. Animals do not have understanding.

The fact that the ox reacts to novel things and thus has distinct representations does not imply the capacity of judgments, that is, the ability of comparison, reflection and abstraction. It rather speaks for acute senses and the ability of association, which rest on the capacity of imagination. How this happens will be the topic of the next chapter.

### **5.1.2. Combination: imagination**

Let us consider Meier's example of the cow staring at the new door of her stable. The ability of the cow to notice that the door is new (which she shows by being surprised) requires something more than mere receptivity. If all the cow had were mere picture-like representations, whose influence would vanish as soon as their objects ceased to be the center of attention, she would not be able to notice the change (see the example of chasing the ball, Case one, in Chapter 4.4.).

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For making the effect of objects count more than a “blind mechanism” (as Descartes sees it), combination of representations is needed. The cow has combined a certain kind of door with the representation of her stable. This happens through association and requires memory. According to Kant, the faculty of imagination is responsible for all combination of representations in animals. In animals, imagination serves as the analogy of reason in that its function is in many respects similar to the conceptual combination that humans as rational animals are capable of.

The capacity to associate is a function of the faculty of imagination, which Kant attributes to animals: “Animals have senses and reproductive imagination [...]. With imagination we can think yet a fictive faculty [...], of anticipation [...] and reproduction [...]. The faculty of consciousness cannot be attributed to animals” (L2, Ak. 28:594). This passage suggests that imagination is a distinct mental process from sensibility as receptivity, without still amounting to consciousness.<sup>42</sup> In a more thorough passage in Volckmann’s lecture notes (MV, Ak. 28:449–50) Kant opens up this issue further:

We can also think a reproduction [...], anticipation [...], without the least self-consciousness, but such a being could not prescribe rules for itself, for the possibility of a rule requires making consciousness of oneself the object of one’s intuition, one must be conscious of what different beings agree on; if many beings exhibit a large degree of the effects which can arise in human beings through reason, for, if they are lacking consciousness, then they

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<sup>42</sup> Since this lecture is from his precritical period, I take Kant here as denying only self-consciousness from animals, not consciousness of perceptions.

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are also missing understanding and reason, and sensibility alone reigns. With animals one calls this an analogue of reason [...] and there is an instinct of sensibility whereby they need no reason, but rather which an external being placed in them for acting, or for working according to instinct; the analogue of reason [...] is the summation of all lower powers.

Kant says here that a lower cognitive faculty can produce behavior similar to that resulting from the use of reason. It operates instinct-like, with no need for conscious deliberation, and this is where the crucial difference between imagination and reason lies in. Conscious deliberation of one's undertakings enables action according to rules and prescribing rules to oneself. This, in turn, is the precondition for all conceptual thinking and all morality.<sup>43</sup>

The core function of the sensible imagination is the synthesis of reproduction. It seeks consistencies among the variable representations and makes association possible, as seen in the earlier example of the squirrel. Imagination reproduces representations that have been received through the senses.<sup>44</sup> Animals do not, however, have the third synthesis, the synthesis of recognition in a concept. Even though Kant (KrV A 103) says that this synthesis is necessary for the representations to be something for the subject, this rules out only consciousness of a meaning, not consciousness of objects.

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<sup>43</sup> On Kant's view on ethics, see Chapter 6.5.

<sup>44</sup> For a detailed exposition of the function of the imagination, see Chapter 4.5.1.

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According to Kant, animals connect representations only through association. It is the basis for their ability to learn. When a squirrel tastes an acorn for the first time and notices that it is delicious, he associates the gustatory pleasure of eating an acorn with the appearance of acorns. The next time he sees acorns he probably hurries to them without hesitation. He, however, does not make a judgment “this acorn is delicious”, whereby he would understand that the delicious taste is inherent in the substance of acorns. Here, the first and the second syntheses are at work. The synthesis of apprehension collects the sensible manifoldness of the act of eating an acorn into one experience. The synthesis of reproduction makes the squirrel remember how the acorn affected him a moment earlier, thus bringing more unity to his experience; and the memory of his pleasant encounter with an acorn makes him hurry to them in future.

An alternative view of this is to attribute reason to animals. This is what Meier does. He explains the cow’s ability to notice the change by attributing reason to her. According to Meier (1752, § 31, 31), animals can have the first of the two degrees of reason, which he understands as the power of cognition, that makes it possible to distinctly perceive (causal) connections between things. Animals can thus have the capacity to recognize the connection between singular beings (Meier 1749, § 37, 73). Animal reason does not amount to recognizing connections between universals. It is not yet possible to form general, universal judgments.

Kant argues that this capacity of the cow to notice the change does not amount to the ability to form the conceptual judgment, “the door of stable is new”, even though it is required for forming the judgment. To become a judgment, the cow would have to know about doors and



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stables and their functions in general, not just in the particular case of her stable. Understanding makes judgments possible. In judgments, concepts are combined with each other. From the forms of judgments, Kant derives categories, the pure concepts of the understanding, according to which the understanding analyzes the material provided by sensibility, as explained in Chapter 4. All these features that are very important for the human mind are lacking in animals, and they become possible through the third synthesis, the synthesis of recognition in a concept.

In his lectures of metaphysics (L1, Ak. 28:276), Kant describes the difference between animal and human consciousness as follows:

[Animals] will have no general cognition through reflection, no identity of the representations, also no connections of the representations according to subject and predicate, according to ground and consequence, according to the whole and according to the parts; for those are all consequences of the consciousness which animals lack.

Animal cognition is always particular and subjective and, as such, insufficient for general, conceptual combination according to the forms of the understanding. A squirrel can represent an acorn, but he cannot represent it as an acorn.

The lack of understanding and thus the lack of the possibility of conceptual combination means that animals do not have the capacity to set rules for themselves, which is required in conceptual cognition. They cannot compare a tree with other trees to find the central characteristics

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that all trees have in common thereby creating a rule or a concept for thinking about trees. They cannot think that this birch that grows beside the field and that juniper that grows on the seashore have one thing in common, namely that they both are trees. This is a useless capacity to animals, even though it is of utmost importance to humans, whose interaction is based on linguistic communication. This, of course, entails also that animals cannot have language, since language operates with concepts.

Furthermore, the squirrel cannot consciously decide whether she eats the acorns available or not; that is determined by such things as how hungry she is; or whether there are more urgent tasks at hand, such as fleeing from a predator. Representations can serve only as necessitating stimuli for animals. Only humans have the ability of conceptual combination. Conceptual thinking broadens the subjective perspective to a universal level and enables action from motives, reflected reasons for action. Animals act on the basis of impulses of the form “now I want X”, without conceptualizing them as such, whereas humans are able to act on the basis of the motive “even though I now want X, I still had better do Y.” However, the capacity of action from reflected motives does not definitely imply such action. It always requires intellectual effort, and often rational creatures act simply from impulses.

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Another example of imagination doing in animals what concepts can do in humans is this passage from *False Subtlety* (Ak. 2:60):

The dog differentiates the roast from the loaf, and it does so because the way in which it is affected by the roast is different from the way in which it is affected by the loaf (for different things cause different sensations); and the sensations caused by the roast are a ground of desire in the dog that differs from the desire caused by the loaf, according to the natural connection which exists between its drives and its representations.

Here, the dog is clearly capable of making some kind of comparison based on the effect of the representations to the faculties of desire and pleasure motivates the dog to this comparison (see also Newton 2012, 7–8), through which he is able to differentiate the two kinds of meat.

Let us assume that the sensible qualities of the roast—in particular its taste, smell and feel—have caused more pleasure in the dog than those of the loaf. Now that the dog sees the two kinds of meat at the same time, he automatically associates them with their previous gustatory qualities, and probably decides to eat the roast first. Since the dog is incapable of the third synthesis, synthesis of recognition in a concept, the pieces of meat remain singular to him. He does not in any way think to himself in terms of the particular roast belonging to the category of roasts in general as rational humans would be able to do, even though this does not necessarily show in any way in his behavior. This is what it is to have the analogy of reason.

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### **5.2. ANIMAL CONSCIOUSNESS**

The previous chapter focused on the questions, what kind of representations animals are capable of and how they can combine them. In this chapter, I will bring this to the level of experience: how do animals experience their representations? An important feature that affects animal experience and that can even be used to question it is that they do not have self-consciousness, which is a distinguishing feature of human mentality. First, I will discuss how the lack of self-consciousness affects experience. On this basis we can answer to the question, what merely sensible animal experience can amount to.

#### **5.2.1. No self-consciousness**

There are passages (such as L1, Ak. 28:27) where Kant clearly claims that animals are not conscious and they do not necessarily even have experience; and some scholars (such as Kemp Smith 1992) take this to mean that Kant denies animal experience even as phenomenal consciousness or object consciousness. Kant's notion of self-consciousness is cognitively quite demanding. In this chapter, I argue that it is necessary in judgments, but experience is possible also without it.

By the term 'consciousness' Kant does not refer to phenomenal consciousness. That Kant denies consciousness and, with it, the conscious experience of animals, does not necessarily mean denying animal

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perceptions and animal experience. Instead, what he denies is self-consciousness, or transcendental apperception. We are operating here with different senses of consciousness, such as consciousness of objects, consciousness of representations, consciousness of meaning and self-consciousness. Kant would ascribe at best the first two to animals.

The fundamental difference between rational and non-rational animals is a difference between judgment and perception:

If one succeeds in understanding what the mysterious power is which makes judging possible, one will have solved the problem [about the essential difference between rational and non-rational animals]. My present opinion tends to the view that this power or capacity is nothing other than the faculty of inner sense, that is to say, the faculty of making one's own representations the objects of one's thought. (FS, Ak. 2:60)

The essence of the understanding consists in the capacity to take one's representations as objects of thought. In other words, understanding is a second-order consciousness of objects whereas sensibility is first-order consciousness of objects. This enables self-consciousness, the capacity to understand that one is the subject in which the representations inhere. This is the kind of consciousness that animals, by definition, are incapable of.

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Also in his lecture of metaphysics (MM, Ak. 29:906), Kant expresses the same idea:

[W]e assume that animals can endure to eternity and that their powers can steadily grow, and yet not attain to understanding, because first an essential piece must then be added to their sensibility, through which alone understanding becomes possible, namely, apperception.

Transcendental apperception is the kind of consciousness that separates rational animals from the non-rational ones. This is also Kant's argument against the assimilationistic view, according to which animals have all the same cognitive capacities as humans do but to a lesser degree. The lack of self-consciousness makes animal experience a flow of constantly changing singular representations that, at most, leave behind only a faint trace so that the next time a similar representation occurs, it is flavored with a faint hint of familiarity, instead of being a unity composed of various representations, which become possible only through apperception.

The capacity of self-consciousness affects action and makes conceptual thinking possible. I have discussed the role of the transcendental apperception in thinking in Chapter 4.3., so I will now concentrate on its role in action. Self-consciousness affects action by providing the possibility to choose what one does and why. There is a difference between performing a task consciously and "just-performing" it. For example, usually when I go home I unthinkingly put the keys where they belong by hanging them on a hook in the hall. Sometimes I put them—equally unconsciously—somewhere else. In that case, I will be in trouble when

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I next leave home: if the keys are not hanging on their hook, I have no idea where I have put them. In those moments I wish I had acted consciously when I put them away, since then I would probably know where they are.

Consciousness of what one is doing does not, however, necessarily make the performance any better. “Just-performing” the task at hand is often faster and the possibility of mistakes is lower. Consciousness adds a cognitive process to it making it a bit more complicated. As I discussed in the Chapter 3.4.1., in many cases being on autopilot, so to speak, is a better option than acting consciously. This is the case, for example, when playing an instrument or driving a car. If I drove a car by directing my movements through careful, rational reflection, my driving would become less smooth than it is when I do not pay so much conscious attention to the cognitive processes responsible for my movements.

Similarly, a skilled piano player does not need to pay too much attention to his playing; it happens quite automatically. If this piano player decided to reflect carefully on how she in fact is moving her fingers while playing, the smoothness of the playing would be lost. This is an expression of the classical centipede dilemma: if a centipede would have to consciously decide which foot to move first, it probably would not be able to move at all.

Animal action is autonomic “just-performing” without conceptual understanding. To act with consciousness, a pig looking at a muddy puddle and a rabbit fleeing from a bird of prey would have to understand that they are acting according to a rule. The pig would have to be able to si-

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lently make the judgment for himself that might be something like this: “What an attractive muddy puddle there is over there! I’ll go and roll in it. It is really good for my skin!” The rabbit would be able to form the thought that could be expressed as follows: “That large bird in the sky looks threatening. I’d better hide as soon as possible.”

Mere capacity of perception, mere ability to experience things in a certain way and the ability to act on this basis is not consciousness, as Kant sees it. Consciousness is understanding what one does, on what grounds and for what purpose. These factors—the content and the purpose of the action and the reasons for it— are often present in the experience of animals but animals are not conscious of them in the sense that they are able to silently spell them out for themselves.

A self-conscious being understands that she is a subject that acts, an active subject. Without it, all representations are nothing but subjective modifications of the mind that serve as impulses which determine all action. In that case, the subject is unable to make autonomous choices. The strongest impulse wins. Animals cannot, in a manner of speaking, rise above their representations and consider what possible consequences each choice entails. What does all this mean, then? How does it matter, especially if, as I said before, unconscious, automatic action is often more accurate than conscious action?

The most significant consequence is that beings without self-consciousness are unable to set rules for themselves. Action according to a rule is possible: we can train animals to follow simple rules, and animal communities also have their strict social rules. These are not, however, rules



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that animals themselves have consciously set. Training animals to follow rules is explicable through association; and the social rules that apply in animal communities are determined through natural mechanisms and the principle “the strongest one wins” rather than through rational reflection.

To be able to set rules for oneself requires the ability of reaching from subjectivity and particularity toward objectivity and universality. Kant sees concepts as rules, and everyone whose concepts are based on the same rules can communicate with one another at a general level. If I refer to the same object through the word ‘avocado’ as you do, we can have a meaningful conversation of avocados. For this to be possible, we need to use the same syntactical and grammatical rules. The more an action is based on reason, the more it is based on rules. It might at first sound paradoxical, but the more an action follows a rule, the freer it is. Reason entails the possibility of free will.

In the same way, the more sensible stimuli determine action, the less free it is. For Kant, moral action is the highest form of rational action. Morality is possible only for a subject that has free will. Will is closely linked to rules, and together they constitute the core of Kant’s moral philosophy, the categorical imperative, which commands one to act according to a maxim which you can will to become a general law. It is a universal rule, form or test for all of our moral actions. Just like concepts, maxims are also rules that can be applied to objects or situations that fulfil the given criteria. In the case of morality, freedom entails responsibility which, in turn, clearly requires self-consciousness. Animals do not have free will, and they are outside morality.

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To put all these elements together, animals that are not self-conscious do not have power of choice concerning their action. They act according to the strongest stimulus. This is not to say that the possibility of choice would be irrelevant for animals. They are completely capable of making the best available choices concerning their action, and the possibility of making choices is a most important factor concerning the contemporary issues of animal welfare. A cow feels better if she has the choice of deciding on what kind of floor she lies down (Manninen et al. 2002). Nevertheless, her choices, as important as they are for her welfare, are not free. She is determined to make only such choices that are the best for her in that situation. She does not take others into account, unless there is some immediate benefit for her in that. Human action is mostly exactly like this, except that I have the feeling that we make more bad choices than animals do but, due to our self-consciousness, we are in the position also of making moral choices from which we do not gain a direct sensible benefit.

### **5.2.2. The cognitive status of animal representations**

Now that we know which kind of mental abilities and consciousness animals lack, and what kind of consequences that has, we can finally concentrate on the kind of consciousness that they can have in the Kantian framework. This will give us the means to answer the core question of this whole study, which kind of experience is possible for animals in Kant's theory; or, what is the contribution of sensibility to experience. The starting point is that Kant regards animals as beings that have repre-

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sentations. How are animal representations to be understood if animals lack the kind of consciousness that we do? Do they have unconscious representations and, if that is the case, what does it mean to have unconscious representations?

In this chapter, I will introduce two ways to understand the cognitive status of animal representations in Kant's philosophy. The first interpretation stresses the importance of the higher cognitive capacities. Animal experience is seen as an unconscious but nevertheless a mental process. According to the second interpretation, animals are conscious of their representations even though they are not self-conscious and cannot conceptually articulate the content of their representations. As an example of the first interpretation I will present Kemp Smith's view; and Naragon's counterargument to Kemp Smith expresses the essence of the second view.

I will argue that this latter view is more correct; but I will also point out that the differences between these two interpretations are not necessarily as wide as they might seem at first. The biggest difference between them is not as much about what animal experience is like as it is about how the terms are used. In this particular context, the term that is perhaps the most perplexing is the notion of consciousness. Even Kant himself uses the term in different senses according to the context, and Kemp Smith's understanding of consciousness is very narrowly outlined, which reflects probably his primary interest in the higher cognitive faculties.

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Let us first look at the theory behind these interpretations. It is a question about the definition of the term ‘consciousness’. Through sensibility, we are able to perceive objects. This is object consciousness. If we assume that it is like something, it can be called phenomenal consciousness. If we can look at these representational contents from a distance, so to speak, that is, if we can think of what they are about and express that, perhaps also make judgments concerning them, we are conscious in a different sense. Then, we have reflective consciousness. This requires inner sense and transcendental apperception.

Again, we must be careful of what we mean by inner sense. To be able of being conscious that the representation  $r_1$  at the moment  $t_1$  and the changed representation  $r_2$  at the moment  $t_2$  are in the consciousness of the same subject is a demanding requirement, and in his pre-critical lectures of philosophy, Kant has even claimed that animals do not have inner sense.<sup>45</sup> I do not, however, believe that Kant would have wanted to claim that animals were unable of temporal perception, which would follow if ‘inner sense’ was read here in the meaning Kant used it in his critical period. In the pre-critical period, ‘inner sense’ comes close to apperception (see also McLear 2011, 9); where as in the critical period, it is more clearly attached to sensibility and temporal perception. Keeping a representation in mind and noticing it change is possible without the conceptual power of thinking, through sensible imagination.

Kemp Smith (1992, xli) argues that animals in Kant’s philosophy are not conscious. Kemp Smith has a strict understanding of ‘consciousness’ as

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<sup>45</sup> See, for example, L1, Ak. 28:276: “animals will have all representations of the outer senses; they will forgo only those representations which rest on the inner sense.”

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having a judgmental character; and this requires self-consciousness. This makes it possible for Kant to make such divisions as appearance–reality, real–ideal and judgment–conditions of judgment. (Ibid., xlii.) Animals are not able to think about the transcendental conditions or propositional contents of experience; and thus they are not capable of having self-consciousness. They just take their experience as given and their action is completely determined by that.

Of course, representations do have a meaning to animals in the sense that each representation determines animal action in a different way. The representation of a predator causes a rabbit to flee, and the representation of birch buds makes her eat. The rabbit, however, does not conceptualize the predator as a threat, herself as fleeing, or the buds as a meal, even though her action can be explained as though she did. She does not have the required consciousness of a meaning, which also allows the use of symbols and thereby language. Kemp Smith's view is that this does not count as consciousness.

Naragon (1991), on the other hand, claims that Kant does not always mean self-consciousness when he uses the term 'consciousness', but sometimes only consciousness of representations. He claims, and I agree with him, that animals are conscious in the latter sense. He argues that even though animals are not conscious of (symbolic) meaning, they still can have consciousness of representations and of objects even though they do not understand their representations *as* representations of objects.

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Consciousness understood as a consciousness of a meaning, as Kemp Smith sees it, requires self-consciousness, which animals do not have: “If animals are devoid of all awareness of meaning, they must also be denied anything analogous to what we must signify by the term consciousness” (Kemp Smith 1992, xlviii, xlix). Naragon (1990, 6n.) considers Kemp Smith’s interpretation of animals as beings with only unconscious representations implausible. Even though Kant (*Anthropologie* §5; BA 18) approves of the idea of unconscious (obscure) representations and even claims that most of human representations are unconscious, Naragon (1990, 10) assumes that Kant’s idea is that only conscious beings can have this kind of unconscious representation.

Kemp Smith grants, however, that even though animal experience is not conscious, it is nevertheless a mental process. Animal experience consists of sensations and feelings that are a part of the causal series of natural events, but this does not yet mean that they were conscious of this series. (*Ibid.*, xlix.) For him, phenomenal consciousness does not qualify as consciousness. Kemp Smith sets high criteria for consciousness: it requires ability to differentiate between representations and their objects and the ‘I’ that accompanies all representations. Naragon admits that Kantian animals are unconscious in this sense but not in the sense of consciousness of representations. He points out that Kant’s use of the term *Bewußtsein* is inconsistent, referring sometimes to consciousness of representations, sometimes to inner sense (understood as apperception, not as a capacity for temporal perception) and that Kant denies only the latter from animals (Naragon 1991, 7, 11).<sup>46</sup>

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<sup>46</sup> See, for example L1 28:276: “Animals are accordingly different from human souls not in degree but rather in species; for however much animal souls increase in their sensible faculties, consciousness of their self, inner sense, still cannot be attained thereby.”

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I would add here that Kant denies an inner sense from animals only in the cognitively more demanding sense, as apperception, not as a means of perceiving objects.

In *Critique of Pure Reason* (A 320/B 376–7), Kant presents a division of representations (known as the *Stufenleiter*) starting from the unconscious ones and proceeding to the more complex ones. Let us have a look at the two first kinds of conscious representations and see if that might help us to understand Kant's view of animal representations:

Conscious representation (*perceptio*)

- 1) "A perception that refers to the subject as a modification of its state"; that is, a sensation (*sensatio*)
- 2) An objective perception; that is, a cognition (*cognitio*)<sup>47</sup>
  - a) a singular cognition that relates immediately to the object; that is, an intuition (*intuitus*)
  - b) a cognition that can relate to several objects by means of a mark; that is, a concept (*conceptus*)

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<sup>47</sup> The claim that Kant seems to present here—that a cognition is either a intuition or a concept—contradicts his definition of cognition as constituted from both intuition and concept. Is it, then, justified to say that animals that certainly have intuitions also have cognitions? One possibility is that Kant wants to stress here the two inseparable components of a cognition; another possibility is, that Kant, perhaps by mistake, uses the term 'cognition' in two different senses, to refer to a cognition on the one hand in a wide sense, on another in a narrow and more familiar sense. In this context, however, there is no reason to go deeper into this problem field.

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Kant does not mention here, where animal representations belong in this division. It is certain that animals have sensations: when we look at the above quotation from his letter to Markus Herz at the beginning of Chapter 5, we can see that his view is that animals do have conscious representations, but only as sensations.

In his lectures of metaphysics (MM, Ak. 29:794), Kant defines perception as “consciousness of sensation”, and continues by describing this kind of perceptual consciousness as follows: “[f]rom pure sensations one cannot make any concepts or communicate them to others, for it is the manner in which one finds oneself with something”. You just cannot find yourself with anything in any manner if you do not experience it. And again, this ‘finding oneself’ should not be seen as a reflective act, since Kant talks here only of the role of sensibility. This quotation supports the idea of the existence of non-conceptual consciousness, which is brilliantly exemplified in animals, even though part of human cognition also is non-conceptual.

Now let us return to the issue of the lack of self-consciousness in animal representations. Kantian animals do not have a transcendental apperception that is expressed in the sentence “I think”, the sense of subjectivity attached to all the conscious representations of rational beings. Animals have only non-conceptual representations, and cannot be characterized as thoughts in this sense. In the place of the “I think” of the apperception animals have “there is” of the stream of sensible representations. In other words, instead of self-consciousness, animals only have subjective object consciousness; that is, a first-order consciousness of their current state they are in, including all sense perceptions, emotions, physiological states and so on.



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According to Kant's view, animals have their own, unique point of view, but they are not aware of it as a subjective point of view. They do not have an idea of independent, objective reality and their own subjectivity. Animal consciousness is merely experiential in the sense that animals are incapable of reflecting representational contents. When a dog has a representation of a bone, the representation includes various components, such as representations of its hardness, color and taste. The dog does not, however, understand that another dog might perceive the taste of the bone in another way. He is unable to tell which part of his representation of the bone has its origin in his own mind and which in the bone itself.

To sum up, the content of animal minds consists of successive perceptions whose contents and relations are not conceptualized at all: properties are not discerned from their bearers, and parts are not understood as belonging to a whole. This means that the dog cannot analyze its experience through universal concepts which require the use of the forms of the understanding. Nevertheless he is able to keep past representations in mind, that is, to reproduce them.

In animals, this capacity is passive: the dog does not consciously choose whether he wants to bring something to his mind or not; rather, it is an automatic mechanism of the mind determined by the way the representation in question affects the faculty of desire. This is made possible through imagination. The experiences of pleasure and displeasure determine the faculty of desire and action in non-rational animals as well as in rational humans. Our capacity to take an objective look at our representations and assess the effects of our actions gives us the freedom of choice and endows us with moral responsibility.

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### 5.3. CONCEPTUAL AND NONCONCEPTUAL INTERPRETATIONS OF KANT

One question that the interpretations of Kant's philosophy of experience deal with is whether conceptual capacities should be seen as a necessary condition for consciousness and proper experience. This dispute between conceptualism and nonconceptualism is closely related to the question of animal experience. If concepts are not needed for perceptions to have content, we can well ascribe rich, conscious experience to non-rational animals. A pig that has certain sensations in her skin and has a visual perception of a muddy puddle goes to roll in it and can enjoy doing that.

Again, if concepts are considered necessary for experience, that is, if there cannot be any perceptual discriminations without the possibility of conceptually referring to their content, if only through a demonstrative concept, Kant's view of animals implies that their perceptions really do not have content (see Hanna 2008, 46). The itchy sensation together with the visual perception determine the pig to go to the muddy puddle. Rolling there relieves the sensations that had determined the pig to do something to change her condition, without her being in any sense an active subject here, and even without this being like anything for her.

One of the most famous slogans in the *Critique of Pure Reason* is Kant's declaration that "thoughts without content are empty, intuitions without concepts are blind" (A51/B76). If this passage is isolated from its context, which introduces the roles of these two functions of the mind in the specific action of generating objective cognition, it seems that it strongly

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suggests that concepts are necessary for experience. This conceptualistic interpretation would imply that there can be no such thing as animal experience if animals are regarded as non-rational beings. Furthermore, it denies the possibility of perceptual content: intuitions gain content only through concepts.<sup>48</sup>

Laiho's (2012, 228) formulation of the nonconceptualistic argument embodies its core: "Perception is possible without thinking. Concepts are necessary only for thinking and judging. Therefore, concepts are not necessary for perception." If we look at the context of Kant's claim about the complementary role of intuitions and concepts, we can see clearly that Kant is not making a claim concerning their roles in general, but only regarding the constitution of objectively valid judgments (see Hanna 2014).

We can also look at the following quotations from the *Critique of Pure Reason* to become convinced that the conceptualistic interpretation of Kant is less accurate than the nonconceptualistic one: "Objects can indeed appear to us without necessarily having to be related to functions of the understanding" (A 89/B 122); and even if the understanding was unable to put appearances under its forms, "[a]ppearances would nonetheless offer objects to our intuition, for intuition by no means requires the functions of thinking" (A 90–1/B 123).

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<sup>48</sup> See for instance McDowell 1994 and Sellars 1968.

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So far, we have seen that Kant allows perceptions for animals. Already this speaks for itself for the nonconceptualistic interpretation (see also Laiho 230). Let us look, for example, at Kant's division of cognition in *Jäsche Logik* (Ak. 9:64–5):<sup>49</sup>

The first degree of cognition is: to represent something;

The second: to represent something with consciousness, or to perceive (*percipere*);

The third: to be acquainted with something (*noscere*), or to represent something in comparison with other things, both as to sameness and as to difference;

The fourth: to be acquainted with something with consciousness, i.e., to cognize it (*cognoscere*). *Animals are acquainted with objects too, but they do not cognize them.*

The fifth: to understand something (*intelligere*), i.e., to cognize something through the understanding by means of concepts, or to conceive.<sup>50</sup> (My emphasis; original emphasis removed.)

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<sup>49</sup> *Jäsche Logik* comprises notes made by Gottlob Benjamin Jäsche from Kant's lectures based on G.F. Meier's *Auszug aus dem Vernunftlehre*. Kant, however, was not very faithful in following Meier's book; he also presented his own comments. The above division of cognition is Kant's own interpretation and elucidation of Meier's ideas so we can assume that he is not simply repeating Meier's ideas but presenting his own views based on them.

<sup>50</sup> Kant's list has three further degrees but they are irrelevant to my subject.

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In the highlighted passage, Kant says that animal representations are not mere subjective modifications of the mind but provide awareness of objects (see also McLearn 2011, 5). What Kant denies from animals is conscious cognition, not conscious representations. Kant also says here that animals are capable of discerning things according to the similarities and differences.<sup>51</sup> Animals cannot, however, conceptually express what it is that they are acquainted with. Perception is “consciousness of sensation”, and Kant describes it as follows: “[f]rom pure sensations one cannot make any concepts or communicate them to others, for it is the manner in which one finds oneself with something” (MM, Ak. 29:794). The role of the perception is to feel and to become affected; the role of the understanding is to judge.

### **5.4. CONCLUSION**

In this chapter, I have looked for the constitutive elements of animal cognition, proceeding from singular sense perceptions to the mental operations that are needed for their combination. I have argued that reproductive imagination makes the combination possible by being the source of memory and anticipation that is necessary for learning and action that is to count more than mere reaction to immediate stimuli. I have also discussed animal consciousness. There is a certain kind of consciousness, namely self-consciousness or transcendental apperception that Kant ascribes only to rational creatures. It is the second-order capacity to have one’s representations as the object of thought. It is necessary for

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<sup>51</sup> This is also an instance of imagination and schemata at work in animals!

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conceptual thinking, freedom of choice and morality. But only that much is excluded from animals; not consciousness of perceptions. Therefore, my conclusion is that the conceptualistic interpretation of Kant rests on false assumptions of the role of intuitions.

Let us look at this in the light of the kinds of consciousness defined in the Chapter 2.1.1., where I introduced a threefold model of the neuropsychology of visual perception. At the first stage, visual stimuli cause neural changes in the visual cortex but this is completely unconscious. At the second level, the input is processed in the occipital lobe where it gets its particular feel. Finally, at the third level, the input can become an object of conscious awareness when it is processed in the frontal cortex.

I claim that Kant's theory allows animal experience being like something for the animal, that is, phenomenal consciousness. However, animals do not have access to their representations as representations but can still process them a bit further through the reproductive imagination. Animals are conscious of objects but not of their representations. They can, to some extent, use their representations in directing their action, but this is always linked to the associated pleasure or displeasure. This awareness of objects is always tinged with the current state of the animal, but the animal cannot perceive this since this state melts together with the perception of the external object. A rabbit can scarcely represent a bird of prey without the strong negative emotion with which it is associated.

To sum up, animals do not make judgments and they do not have transcendental apperception; they are not self-conscious. Even though they

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do perceive the objective world from their own, subjective viewpoint, they do not have an idea of objective reality and the subjective nature of their experience. Animals are incapable of reflecting the content of their representations. The content of animal minds consists of successive perceptions whose relations are not conceptualized at all: properties are not discerned from their bearers, and parts are not understood as belonging to a whole. Instead of self-consciousness, animals have only subjective object-consciousness of the current state they are in, including all sense perceptions, emotions and physiological states.

### **5.5. DISCUSSION: KANT VS. DESCARTES**

To conclude, I would like to discuss the question of how exactly Kant's view of animal experience is different from Descartes' view. This is important because it helps us see the real contribution of Kant ascribing minds to animals while he still retains the cognitive difference between humans and animals as a difference in kind. I will discuss two issues here, representations and experience, and mechanism. First, I will look at Descartes' view in Kant's terms, after which I will bring Kant closer to the Cartesian view.

The context in which Kant studies animals is somewhat different from Descartes' starting point. For Descartes, animals are examples of the mechanical action of the material substance, whereas for Kant their role is to illuminate the functions and possibilities of sensibility. This highlights the difference in the way in which Kant and Descartes see the

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cognitive difference between humans and animals: for Descartes, it is a difference in the ontological constitution; for Kant, the difference lies in the quality and quantity of the mental faculties. This difference might appear as a huge one, given that Kant explicitly refutes it. However, when we look at how they conceived animal experience, the difference is not anymore necessarily huge. As we have seen, the Cartesian mechanism does not have to be read as implying that animals have absolutely no experience; and Kant's ascribing of minds to animals need not imply that the representations which animals have are cognitively complex.

*Prima facie* it seems as though the difference between the views of Descartes and Kant on animals is simply that Cartesian animals have no experience since they do not have minds; whereas the Kantian animals have. But as we have seen, the issue is not as simple as that. The Cartesian view excludes all experience from animals only in its standard interpretation. If we read Descartes according to the radical or open interpretation (described in Chapter 3.3.1.), that is, if we accept that mechanics can account for cognitive states and affective states, the difference is no longer as large.



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### 5.5.1. Animal machines and representations

Let us first look at Descartes' way of dividing sense perception into three parts and see how it relates to Kant's division of representations laying special attention to the question whether there are differences in where animals are situated. According to Descartes (*Meditationes* AT VII:436–37/II:310), sense perception consists of three parts. First, the external objects affect the senses (sensation). This causes inner, physiological movements, whereby the soul becomes affected (perception). Finally, it is possible to form a judgment concerning the sensation (understanding).

In Descartes' theory, animals remain at the first, physiological level of sensations. Kant's view of animals differs essentially from that of Descartes in that Kant thinks animals have soul and representations. Kant's division of representations, proceeding from unconscious representations, is in this respect completely beyond the abilities of Cartesian animals. According to Kant's view, animals reach the second level in Descartes' division, since representation is not only a mechanical reaction but a mental state, a perception. Animals do not, however, reach the third level, since they have no capacity to judge.

So far this looks quite simple. Kant's main point against the doctrine of AM is that to be able to move according to representations, animals must have minds as the substance for the representations to be inherent. If animals do not have minds, as Descartes claims, they cannot have any kind of perceptions. In this way, Kant's view of Descartes leads to the standard interpretation. If we read Descartes according to the open or

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radical interpretation, we can proceed further to diminish the difference concerning the kind of animal experience between the two views.

The role of the mind in Descartes' theory is similar to the role of higher cognitive capacities in Kant's theory: to allow the understanding of one's representations as thoughts and to take diverse propositional attitudes toward these thoughts. From the Kantian perspective, the chief mistake in Descartes' view is that Descartes does not ascribe minds to animals, which he should do because the Cartesian animals clearly have representations, and this is not possible without minds.

### 5.5.2. Kantian mechanism

Even though Kant regards animals as conscious beings (at least to a certain extent), he still wants to emphasize the mechanism of animals (and also the mechanism of the animal side in humans), just as Descartes did. What raises humans above the mechanical laws is the possibility to free thinking that is independent of sensibility. Animals are necessitated to act according to the strongest impulse; humans can choose. For instance, in his *Metaphysik der Sitten* (Ak. 6:355) Kant emphasizes that we should never abandon reason and morals, since otherwise we are subject to "the same mechanism of nature as all the other species of animals."

How does determinism go together with the phenomenal consciousness of animals? Kant did not have to accept the Cartesian doctrine of animals subject to merely mechanistic laws even though he denied the

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autonomic, rational action from them. One alternative remained, namely Leibnizian spiritual determinism:

[A]ll necessity of events in time in accordance with the natural law of causality can be called the *mechanism* of nature, although it is not meant by this that the things which are subject to it must be really material *machines*. Here one looks only to the necessity of the connection of events in a time series as it develops in accordance with natural law, whether the subject in which this development takes place is called *automaton materiale*, when the machinery is driven by matter, or with Leibniz *spirituale*, when it is driven by representations; and if the freedom of our will were none other than the latter [...], then it would at bottom be nothing better than the freedom of a turnspit, which, when once it is wound up, also accomplishes its movements of itself. (*KpV*, Ak.5:97.)

Spiritual determinism made it possible for Kant to put determinism and animal mentality together (Naragon 1990, 19). Leibniz (2005, § 52) also regarded human soul as a spiritual automaton in which everything is pre-determined and free will is only an illusion. According to Kant's view, this applied only to animals, whose action is completely determined by their physiology and representations. In other words, animals do not act in the sense of autonomic, free action; they only *react*.

Naragon (1990, 21) finds the central difference between the views of Descartes and Kant is the way of explaining natural events. In Descartes' view, natural events can only be explained mechanically whereas Kant thought that humans need teleological explanations because of

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the complexity of natural phenomena. Despite this, teleological causality is an accomplishment of reason and thus ideal mechanical causality being real. (KU § 65, 284–5.) In other words, natural events always have causes in the preceding events, but human reason has a tendency to seek purposes for them, partly because deterministic explanation is very complex and does not serve reason as well as teleological explanation. In this way, the sphere of teleological explanation is wider for Kant than it is for Descartes, who accepted non-mechanical explanations only for a tiny part of human action, namely those actions that are based on thinking (Naragon 1990, 21).

Plants grow and decompose according to biological laws. Animals additionally have representations and the capacity to move according to them, but their movement is to be seen only as reactions to preceding representations or physical stimuli. To be able to understand animal action, humans can give teleological explanations for animal behavior. Only rational humans can act according to ends that are not necessarily determined. I can strive to improve my personality, for example, by consciously deciding to become more compassionate and less self-centered. This might involve controlling my natural reactions and using my willpower choosing to act in a different way.

In the *Critique of the Power of Judgment* (§ 65, Ak. 5: 374), Kant discusses one essential difference between living beings and mechanical objects (such as watches) to demonstrate why the Cartesian analogy between bodies and machines does not work. That difference is that living beings have internal activity, or a formative power (*bildende Kraft*). In this context, it is a power to have intentions; a power to intentional

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action; a power to direct one's action according to ends.<sup>52</sup> The motive power in mechanical things is external: the parts affect the movements of other parts. Unlike living beings, they cannot generate new parts or even new things, replacing missing parts or repairing themselves. Of course, the external powers also affect living beings, but living beings are not completely at their mercy.

Explanation of life is something that “can be conceived without contradiction but cannot be comprehended” (KU § 64, 286). Living beings—plants, animals and humans—are under natural laws on the one hand but, on the other, can also be the causes of their own actions. Naragon (1990, 22) condenses Kant's attitude towards Descartes' doctrine of animal machines as follows: “[B]rutes can be thought of as machines and according to the universal causality of the phenomenal world they are machines, but they cannot be comprehended or understood as machines, and consequently, as a *scientific* (as opposed to a metaphysical) doctrine, Descartes' hypothesis is worthless.” If we are interested in knowing why a dog is pacing impatiently by the front door, we are not satisfied with answers that focus on the physiological mechanisms that have lead the dog there but are seeking to know what has motivated the dog to do what he is doing.

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<sup>52</sup> Ina Goy (2012 and 2014) has discussed Kant's notion of formative power in detail. For the purposes of my thesis it is sufficient to note that in his critical philosophy, Kant uses the term in the biological sense (in contrast to his epistemological use of it in his pre-critical philosophy) and means by it, to quote Goy (2012, p. 32), “a natural force that is responsible [...] for establishing and sustaining the organized teleological *order or form* of organized beings.”

## ***6. Hume and the experience of rational animals***

### **6. HUME AND THE EXPERIENCE OF RATIONAL ANIMALS**

Both Descartes and Kant maintain that there is a difference in kind between animal and human minds, which makes discursive thinking through general concepts a unique skill for humans. Animals have only sensibility, and it is controversial whether that alone is sufficient for conscious experience. Before Darwin's theory of evolution, it was easier to argue for the difference in kind between humans and animals than it is today. Today, we have to account for the generic origin of both physical and mental traits between species, which was not considered a necessity before Darwin. However, many authors before Darwin also defended the view that the difference between human and animal cognitive capacities is only a difference in degree. One argument for this view was the physico-theological principle, *natura non facit saltus*, that says that nature does not make jumps but all change is gradual. The move from sensibility to discursivity would be a sudden jump, and therefore reason must come in degrees.<sup>53</sup>

As stated in Chapter 2, nonconceptualism, assimilationism and the bottom-up approach to the issue of the difference between human and animal minds often go hand in hand. I see Kant as a nonconceptualistic differentialist whose view can be approached either top-down or bottom-up, depending on the focus. Now, the question of this chapter is, how does the replacement of differentialism by assimilationism affect the view concerning animal minds and animal experience? What are the key differences between the two views? Do they lead to different kinds of views concerning the human-animal relationship and the ethical guidelines of our treatment of animals?

<sup>53</sup> This argument has been presented, for instance, by G.F. Meier (1749, § 60, 107–8).

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David Hume is known for his skepticism concerning causal connections between objects. He claims that causality is just a product of the imagination, not a property of the objective world. Causality is an important concept in the philosophy of animal minds: what is the cause of animal behavior? An issue that constantly appears in the philosophy of animal minds is the methodological starting point: it is difficult to verify our views on what happens in animal minds (see Chapter 2). We must base all inferences concerning animal cognitive capacities on perceptions of animal behavior. Given this, it is surprising to hear a skeptic such as Hume say that animals are beings “endowed with thought and reason as well as men” and that the grounds for animal thinking are “so obvious, that they never escape the most stupid and ignorant” (T 1.3.16, 176). In the following, I will first explain how Hume justifies this claim. After that, I will focus on its content: what does Hume mean by reason? I will conclude this chapter by comparing the ethical implications of the approaches of Kant and Hume to animal experience.

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### **6.1. HUME ON ANIMAL EXPERIENCE**

Hume's theory of the understanding is quite different from Kant's view, already in relation to the concepts on which it is built. Before focusing on animal reason, I will briefly define the concepts with which he is operating. For Hume, perceptions are mental contents. They are either impressions or ideas. Impressions are immediate sensations, and ideas are based on them. (T 1.1.1., 1.) Ideas can be characterized as "faint images" of impressions (ibid.). The difference between impressions and ideas is roughly the same as that between sensations and thoughts: impressions are felt whereas ideas are thought. Perceptions can be simple or complex. The impression of an apple is complex. It is composed of numerous simple impressions such as certain shades of color and taste. The same division can also be made at the level of ideas. Hume's theory is empirical: the foundation of knowledge and concepts lies in experience, in immediate perceptions.

The mind can combine its successive perceptions according to three principles or qualities: resemblance, temporal or spatial contiguity, as well as cause and effect. They are acts of the understanding and are not to be found in the objects themselves. (T 1.1.4., 10.) Experience has taught us that when we put a piece of paper in the fire, it burns. We do not, however, perceive any necessary connection between the fire and the burning of the paper. It is just a custom developed through many similar situations that has made us expect the burning of the paper when we put it in the fire. Memory is important here: empirical learning would not be possible without it.



## 6. *Hume and the experience of rational animals*

For Hume, imagination and memory are closely related capacities. The difference between them is to be found primarily in the vivacity of the idea.

We find by experience, that when any impression has been present with the mind, it again makes its appearance there as an idea; and this it may do after two different ways: Either when in its new appearance it retains a considerable degree of its first vivacity, and is somewhat intermediate betwixt an impression and an idea; or when it entirely loses that vivacity, and is a perfect idea. The faculty, by which we repeat our impressions in the first manner, is call'd the *memory*, and the other the *imagination*. (T 1.1.3., 10, see also T 1.3.5., 84.)

Another factor that distinguishes between these capacities is the amount of combination they allow: "Wherever the imagination perceives a difference among ideas, it can easily produce a separation" (T 1.1.3., 10). Through the combination of ideas, the imagination can produce fictive ideas such as a unicorn or a mermaid. Hume's understanding of imagination varies according to the context: "When I oppose imagination to the memory, I mean the faculty by which we form our fainter ideas. When I oppose it to reason, I mean the same faculty, excluding only our demonstrative and probable reasonings." (T 1.3.9.n, 117). Memory is tied to the original impression which retains its vivacity; imagination has fewer restrictions for combinations, but at the cost of vivacity. Hume's notion of imagination is less technical than Kant's. For Kant, memory is a subfaculty of imagination, and Kant keeps it strictly separated from reason.

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### **6.2. ANIMAL REASON**

Hume is quite certain that animals have reason, and one does not even have to be an expert on animal psychology to notice this. What exactly is this animal reason that Hume is so convinced of? Can his claim be understood as the opposite of what Descartes and Kant say? Do they talk about the same thing when using the word ‘reason’, or do they have different understanding of the nature of reason? I argue that Hume counts more mental acts under reason than Kant does, so the disagreement concerning animal reason is not entirely genuine. However, their attitude to the implications of our assumptions (or knowledge) concerning animal minds is different: Kant’s view complies with Morgan’s canon by ascribing animals as low cognitive capacities as necessary to explain their behavior; Hume’s view corresponds more to our intuitive understanding of animals as beings that are cognitively similar to us.

Let us first see how Hume argues for his claim. It is based on the following two rules of causal reasoning: 1. “There must be a constant union betwixt the cause and effect” and 2. “The same cause always produces the same effect, and the same effect never arises but from the same cause” (T 1.3.15, 173). If we have learnt that two objects, A and B, often accompany each other so that  $A \rightarrow B$ , and we meet an object C that is similar to B, we can analogically infer that  $A \rightarrow C$ . The more B is similar to C, the more certain the inference is (T 1.3.12, 142; EHU IX, 104). For example, having learnt that pieces of paper easily burn in a fire, a person coming across cardboard for the first time can infer that this will also happen to cardboard since, in many respects, it is similar to paper.

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Now, these principles can also be applied to comparative psychology:

'Tis from the resemblance of the external actions of animals to those we ourselves perform, that we judge their internal likewise to resemble ours [...]. When any hypothesis, therefore, is advanced to explain a mental operation, which is common to men and beasts, we must apply the same hypothesis to both [...]. (T 1.3.16, 176)

The aim of human action is often to increase pleasure and to avoid pain. Animal behavior is similar to human behavior in this respect and, by using the first rule of causal reasoning, we can infer that animal behavior has the same cause, namely conscious thinking. This is different from Descartes' and Kant's idea that all animal action can be explained through instincts and sensibility. Hume claims that they commit to the so-called double standard in explaining animal and human behavior: a similar phenomenon is explained through different mechanisms depending on the species. Also Kant recognizes that human and animal action have a great number of similarities, and thus sees animals as analogies of humanity. He, however, claims that we should use this only as a guideline to our attitude to animals, not as an objective fact about animal minds.

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Hume thinks that we can reliably infer from animal behavior that animals are capable at least of: (1) empirical learning, (2) instrumental reasoning, (3) sympathy, and (4) instincts. Let us take a brief look at each of these. Empirical learning is based on the power of perception, memory and imagination. Rather than a reflective, conscious skill, it is an automatic custom:

It is custom alone which engages animals, from every object that strikes their senses, to infer its usual attendant, and carries their imagination, from the appearance of the one, to conceive the other, in that particular manner, which we denominate *belief*. No other explication can be given of this operation, in all the higher, as well as lower classes of sensitive beings. (EHU IX, 106)

On the basis of the immediate sense perceptions, animals infer things they have learnt to associate with them. For example, the sight, taste and other relevant immediate perceptual properties of an acorn make a squirrel think about its taste and nutritional value. This inference entails practical (not theoretical) understanding of the principle that the same events arise from the same reasons; meaning that it is possible to use causal inferences in practice without a theoretical understanding of causal relations. Furthermore, this requires memory. (EHU IX, 104–5.)

All this happens automatically, and it is a custom rather than a reflected reasoning. This custom is still not entirely instinctual and unconscious, but amounts to a belief. Practical causal reasoning does not, however, require much cognitive effort. In Hume's example, a man who comes to a river understands with hardly any conscious cognitive efforts, what would follow if he fell in the water (T 1.3.8, 103). This automatic infer-

## ***6. Hume and the experience of rational animals***

ence affects the behavior of the man and his experience of being at the riverside—he probably walks with caution—and it is nevertheless an inference that is composed of a belief that has a content (such as the beliefs “The river is wet” and “I will get wet if I fall”).

The second capacity that Hume ascribes to animals, instrumental reasoning, means that animals are able to choose a suitable means to an end. They are capable of the instrumental use of causal inference. (T.1.3.16, 176.) Instrumental reasoning is a subtype of empirical learning. Through this capacity, an acquired custom can be applied to new situations. Instrumental reasoning requires ability to discern at the level of causes and effects which of the several concurrent events is the cause of a given effect (EHU IX, 105–6). Understanding the basic rules of causal inference is necessary for instrumental reasoning. Animals can learn that similar effects have similar causes and that two causes must be different if they have different effects (T 1.3.15, 174). In instrumental reasoning, this knowledge is used as the principle of action.

Thirdly, animals are capable of sympathy, “the communication of passions” (T 2.2.12, 398). Through sympathy, animals are able to recognize each other’s moods. A dog, for instance, discerns whether another dog is challenging him to a serious fight or inviting him to play. The recognition of moods can be explained in two ways: as behavior reading or as mind reading, which is a cognitively complex understanding that other animals also have a point of view (see the discussion concerning the theory of mind in animals in Chapter 2.3.). The dog in the first example does not need to understand the point of view of the other dog as a hostile or a playful mood, but only what kind of intentions her behavior

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suggests and, on this basis, she can adjust her own behavior. Sympathy can therefore be understood as a subtype of instrumental reasoning.

Instincts are the fourth mental capacity that Hume ascribes to animals. Instincts are often regarded as innate automatic reactions that do not provide any kind of consciousness, but Hume regards them also as a source of knowledge, as important as reason. Instincts, for example, guide birds to build nests. In fact, Hume sees also reason as a kind of instinct; we do not know how it really works. (EHU IX, 108).

Hume's approach to the relation between reason and instincts differs remarkably from the one suggested by Descartes, for whom instincts are completely unconscious and only reason, as a generically different capacity, is a necessary condition for consciousness. Hume brings reason and instincts closer together but this does not mean assimilating them. Reason retains its characteristics, but is not elevated to any exclusive position. By counting it as an instinct, Hume emphasizes that it is as natural a capacity as any other tendency. Hume's project can be labelled as a naturalization of reason.

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### **6.3. IS ANIMAL REASON EQUAL TO HUMAN REASON?**

Although Hume argues that there are no specific human mental capacities that animals would not have, there are still some things that are possible only for human minds. Only a rational human mind can be independent of impressions. This relation to impressions constitutes the most fundamental difference between human and animal minds. This affects the following three aspects in particular: the variety of passions, the ways of reasoning, and the attachment to the current context.

First, humans have a wider selection of passions and motives. The objects of the passions of animals are always bodily whereas humans can also have passions whose objects are imaginary. Only humans can be passionate about ideals such as equality, freedom and ideology, and these ideals can motivate their actions. Animals care about concrete things such as nourishment, and their motivation of action constitutes bodily states and perceptions and innate inclinations (this applies also to a great deal of human behavior).<sup>54</sup>

Secondly, animal reasoning is always associative, whereas humans are able to make inferences at the level of ideas through demonstrative reasoning, which concerns the relations between ideas. Practical causal reasoning and instrumental reasoning are based on custom and they use repeated impressions as their material. Hume calls the relations of resemblance, spatial and temporal contiguity and causation qualities or natural relations, and they are rather automatic and unconscious

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<sup>54</sup> On Hume's theory of passions, see for example T 2.1.1., 276; and on passions of animals, see T 2.1.12., 326.

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functions of the mind in contrast to the relations of identity, qualitative and quantitative relations and contrariety, which are based more on the comparison of ideas (T 1.1.5, 8; T 1.3.1, 23). Humans can reason at the abstract level and deliberate, for example, the truth conditions of the laws of logic.

Along with the tangible matter of logical inferences to their form, humans also can also detach themselves from their current subjective situation. In other words, humans have the ability to decenter. That means that human thinking is not tied to the current context (me–here–now). This is necessary for societal and moral thinking, where the focus can shift from what is subjective and immediate to a more general point of view. By this, Hume does not suggest that human reasoning is in any way “higher” or “better” than animal reasoning, but just a different kind of reason that is suited for human needs.

Human society is fundamentally different from animal societies in that human societies are based on artificial institutions, such as property (Pitson 1993, 312). According to Hume, human individuals need support from the community since we have numerous wants but poor means for attaining them whereas the means of animals are more proportionate to their wants. For example, a carnivorous lion is strong and brave whereas a sheep, which is satisfied in eating easily attainable grass, does not need the strength and temperament of the lion. For humans, society provides the force, ability and security, which we—as individuals—would be short of on our own. (T 3.2.2, 484–5.)



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A short answer to the question whether animal reason is equal to human reason is affirmative: animal reason in its essence, as a power to causal reasoning, is exactly similar to human reason. However, even though animals have the same reason as humans, they are not capable of using it in its full potential. The scope of things to which they can apply reason is remarkably smaller than it is for humans. Besides these three aspects, there is still one crucial difference between human and animal minds: morality. In Hume's view, however, morality is however not based on reason, so I will postpone the discussion of morality to chapter 6.5.

### **6.4. COMPARISON OF THE HUMEAN AND THE KANTIAN VIEWS OF ANIMAL EXPERIENCE**

Seeing the difference between animal and human minds as a difference in degree instead of a difference in kind has an effect on the way in which we relate to the role of sense perceptions and reason. I am particularly interested in the question of to what extent the disagreement between the two positions concern animal experience and to what extent it is only terminological, concerning the content of the concepts.

Even though Descartes, Kant and Hume give different answers to the question whether animals have reason—Descartes and Kant giving a negative answer and Hume an affirmative one—they do not, in fact, disagree that much on the question of what kind of cognitive operations animals are capable. For the most part, their disagreement rather concerns the definition and limits of reason. Hume allows a wider use

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of the concept of reason whereas Descartes and Kant count only a small part of it as “real” reason. They do not disagree on the question, what kind of reason is possible only for humans. In the following, I will put the Cartesian view aside and compare the Humean view only with the Kantian view.

Now the constituent parts we are operating with here are (1) the objective world (as the matter for sensibility), (2) sense perceptions concerning the objective world (the interaction between the subject and the object), and (3) the spontaneity of reason. According to Hume, the spontaneity of reason intermingles with sense perceptions. This intermingled reason constitutes animal reason; the independent use of reason is reserved for humans. Kant agrees with Hume on this latter point, but claims that animal behavior is not to be explained by attributing reason to them, but through sensible imagination.

The disagreement between Kant and Hume concerns the explanation of animal behavior. Hume says that they have reason because they clearly are capable of practical causal reasoning. Kant agrees that animals are capable of it, but not because they had reason but because they have imagination. In the following, I will focus on the level of sense perceptions. How is the role of the sensibility different for Kant and Hume, and how does it affect animal experience? Does it have any effect on the sensible experience whether reason is seen as a package or in degrees? In other words, is the experience of Humean animals that also use reason more conscious, more sophisticated or more articulated than that of Kantian animals?

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Disagreements concerning the nature of animal experience are likely if consciousness is considered commensurate with reason.<sup>55</sup> If we accept this, it logically follows that Kant cannot ascribe phenomenal consciousness to animals; and that, in the Humean view where reason and consciousness come in degrees, the more a being is capable of using understanding, the more conscious is its experience.

Hume proceeds bottom-up from the shared fundamentals to the more refined capacities and greater independence from impressions. He sees reason as a natural and instinctive way to comprehend the world which can be further exercised independently from the objects of the experience. Kant proceeds top-down from the distinctive human cognitive capacities that are beyond the reach of animals. For Kant, understanding is a discursive capacity, and beings that have it can apply it to the objects of experience or thought. In this respect, the experience of beings that have understanding is therefore different from the experience of beings that do not have it.

Especially the conceptualistic interpretation emphasizes this difference. According to the nonconceptualistic interpretation, it is not as extensive; and perceptual content is seen as enabling rich experience. Still, even from the nonconceptualistic viewpoint, Kant must give different accounts for the mechanisms of human and animal behavior, that is, he must use the double standard that Hume criticizes and avoids.

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<sup>55</sup> The Cartesian view is a clear example of this kind of approach, at least according to its standard interpretation. Other proponents of this view include Norman Kemp Smith and Donald Davidson (see Chapter 3).

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How exactly are these views different from each other besides the terms they use? Let us approach this problem through an example. Senni, a golden retriever, has learnt that if she offers her paw when asked she gets a treat. Now, if she sees that her owner, Olivia, is holding a treat, Senni desperately tries to get it by offering her paw even if she is not asked to do so. Hume would regard this as a clear example of the instrumental use of reason. Senni uses reason: she is exercising a species of causal inference, and we can conclude this simply by observing her behavior.

Kant would say that we can well explain Senni's behavior without attributing reason to her. Through experience, Senni has learnt that every time when she offers her paw, it is likely that she will get a treat. The cognitive operations at work are memory, anticipation and reproduction. The pleasure of chewing a treat or the action of offering a paw is not immediately present in the visual representation of the treat; Senni must be able to associate them with each other. According to Kant, if Senni were using reason, as Hume claims, she would be able to form the judgment, "My offering a paw leads to my getting the treat." Reason adds the capacity to conceptualize the experience. This, in turn, makes it possible to assess it and its motives: is it good for me to pursue a treat? Why does Olivia reward my offering a paw with a treat? Where else does the similar relation pertain?

Also Hume would agree that this is something Senni is incapable of, since it operates at an abstract, conceptual level. The capacity of reason would not, however, have to affect Senni's experience of the situation, at least if we accept the nonconceptualistic interpretation. It could,

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however, make things slightly more complicated in broadening Senni's perspective in the manner described above. The experience is conscious already without the capacity of reason.

At the core of the whole issue about animal rationality is the question of the mechanism of association and causal reasoning. As the example showed, what Kant and Hume disagree over is how it should be explained. The principle of causation is to be located in the abstract part of reason. According to Hume's bottom-up reasoning, we come to the idea of causality through empirical experience whereas for Kant, causality is one of the categories of the understanding and, as such, is not applicable to the sensible association of animals. The sensible association is to be explained through a different process, imagination.

Both Kant and Hume regard association as a passive, sensible capacity that does not require extensive use of understanding. It is based rather on imagination (Kant) and custom (Hume). Both Hume and Kant argue that causality is a function of the mind rather than a feature of the objective world. Moreover, Kant points out that the world itself has to function accordingly, otherwise it would be impossible to find any kind of regularities there. The objective world, however, does not generate causality for the mind to pick up. Causality is generated by the mind to conceptualize certain kind of perceptions. Both Hume and Kant agree that understanding causal relations at the abstract level is possible only for humans.

Kant and Hume agree on the function of the objective world and the spontaneity of reason; and their disagreements here are terminological: for Kant, the spontaneity of reason alone constitutes understanding, and

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for Hume it is only a part of understanding, that which is not dependent on impressions. Their disagreements concern passive sensibility. Hume claims that understanding operates already on this level by picking out regularities from perceptions whereas Kant claims that it is imagination that does all this, not understanding. *Prima facie* it seems that Hume's view offers a simpler explanation for what is happening in the mind whereas Kant is multiplying entities beyond necessity by having imagination at the sensible level, and understanding at the discursive level.

In explaining causal reasoning, Hume increases the ratio of abstract thinking and decreases the role of impression. This makes it easier to explain animal intelligence. Now that not all animal minds are in one uniform group, there is room for variance in animal rationality without having to commit to a double standard in explaining similar animal and human action through different mechanisms. Kant explains causal reasoning in animals through association.

Another important difference is their attitude to animal minds. Kant's starting point is that we cannot really know what it is like to be an animal and what cognitive operations they are capable of; and since their behavior can be explained without ascribing reason to them, it is reasonable to assume that they have only sensibility. Hume, on the contrary, maintains that it is certain that animals have reason and that they think. Hume is a skeptic concerning empirical matters and the objectivity of causal relations, and thinks that we can be as certain of the principle of animal action as we can of other empirical matters. Although we cannot look into animal minds or communicate with them by using language we can infer fairly reliably that their actions are based on using reason in the same way as we do.

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### **6.5. DISCUSSION: RELEVANCE TO ETHICS**

To conclude, I want to briefly discuss the role of the view of animal experience in animal ethics by comparing Kantian and Humean ethics. Hereby I want to show how the discussion concerning animal experience can have relevance in ethical argumentation—this is the case in Kant's view; but the moral status of animals can also be grounded on other factors than what kind of experience they are assumed to be capable of—this is the case in Hume's view. I will not, however, assess these arguments or commit to them since that is outside of the scope of this work.

Since the approaches of Kant and Hume to the cognitive difference between humans and animals are different, it would be easy to assume that their approaches to animal ethics would also be different. The issue is not, however, as simple as that. The views of Kant and Hume concerning the foundations of morals are also very different from each other, Kant stressing the role of reason and Hume the role of sensibility. Despite these striking differences, their views on the proper treatment of animals agree to a surprising degree.

In Kant's deontological ethics, the focus is on the motives of moral action instead of its effects. Natural inclination or sympathy is not an acceptable motive for moral action since they are contingent properties that some people have and some do not. Kant searches for a universal moral law, and contingent properties are not a proper foundation for it. The foundation of morals is to be found in reason. Moral actions are based on correct reasoning according to the universal and authorita-

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tive laws of the reason. We have a duty to respect these laws and to act according to them. Will is the capacity of reason to produce action, and good will is the capacity to generate correct moral action. Actions done out of good will and duty result from correct reasoning and they have moral value.

The universal principle for all moral action is the categorical imperative: “[A]ct only in accordance with that maxim through which you can at the same time will that it become a universal law” (GMS, Ak. 4:421). The categorical imperative concerns the form of moral action and not the content. It is a test for the reasoning of the practical reason: a good reasoning is not contradictory. We cannot rationally will that contradictory principles would become universal laws. For instance, breaking a promise contradicts the concept of a promise, and were it to become a universal law, the concept of a promise would lose its meaning.

The so-called humanity formula of the categorical imperative is interesting in discussing animal ethics: “So act that you use humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means” (GMS, Ak. 4:429). Since this formulation orders us to respect humanity, it is one reason for the low status of animals in Kant’s ethics. However, it should be kept in mind that the essential element in humanity is rationality as the capacity of setting ends to oneself, not the belonging to the human species. (GMS, Ak. 4:437; see also Religion 6:26–7; KU, Ak. 5:426–7). Animals are mere things, that is, beings that have no reason. Their existence depends on nature and they have only instrumental value, whereas persons have inherent value. (GMS, Ak. 4:428.)



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The categorical imperative sets a qualitative condition for the mental capacities for moral agents: moral agents must have reason and will. Animals have neither. Moral action is independent of contingent states of affairs and thus free, that is, it corresponds to the universal moral laws of the reason. Moral agents are autonomic beings that act according to moral laws (MS, Ak. 6:223). Free moral action is action according to the agent's best judgment. It requires the capacity to make intellectual choices based on good will independent from sensible desires.

Kant claims, moreover, that humans do not have direct moral duties toward animals. For Kant, rationality is a decisive differentiating factor between animal and human minds. The capacity to set ends for oneself is integral in this factor. Rationality is what makes beings ends in themselves. (MM, Ak. 29:897, 907.) Animals are therefore not beings that have to be treated as ends in themselves. Kant does not, however, mean to claim that we are allowed to treat animals however we please, even though he accepts treating animals merely as a means to our purposes.

Kant writes a great deal about duties to other humans but not as much about duties to animals. In Collin's lecture notes he briefly discusses duties to animals: "animals exist only as a means", because they are not self-conscious and they do not have the power of judgment. He, however, concludes from this only that we do not have direct duties to animals. He does not say that we have no duties to them; instead, "our duties toward them are indirect duties to humanity" (Collin, Ak. 27:459).

If I hurt a hedgehog, I would act wrongly in the moral respect, even though I have no direct moral duty to the hedgehog not to hurt him, but

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because it is against moral duties to humanity. Hurting an animal is a manifestation of the low moral quality of the agent, and this trait will probably manifest itself in other circumstances where rational creatures might be involved. It can be argued that following the maxim of cruel treatment of animals leads to a contradiction, and therefore it cannot be willed to become a universal law.

Kant regards animals as analogies of humanity (see Chapter 5), and therefore the way I treat animals reflects my way of treating people. Nevertheless, if humans gain a huge benefit from the instrumental use of animals, even if it necessarily includes cruelty, it is morally acceptable (unnecessary cruelty is however not acceptable). (Collin, Ak. 27:459–60.) According to Kant's example, "[i]f a master turns out his ass or his dog, because it can no longer earn its keep, this always shows a very small mind in the master" (Collin, Ak. 27:459). The attitude to animals suggested in this passage contradicts the currently accepted practice of slaughtering productive animals that are no longer productive.

A central difference between the ethics of Kant and those of Hume is the role of reason, which is manifested in the relationship towards the categorical imperative, which is the decisive principle in moral questions for Kant and which for Hume is irrelevant. For Kant, reason is the ultimate source of morality whereas for Hume it has only an instrumental role. The foundation of morality is instead to be found in passions and sentiments that Kant considers too vague to establish the universal principle of moral obligation.

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Hume argues for his view by discerning the roles of reason and passions. Reason is concerned about the relations between facts; or “the discovery of truth or falsehood” (T. 3.1.1, 458), morality being “more properly felt than judg’d of” (T 3.1.2, 470). Our passions, in particular the feelings of pleasure and displeasure, determine what we pursue in life. We use the information provided by reason in this purpose, and in this respect reason is subordinate to passions. What we choose to do is tied to the idea of the expected pleasure or avoidance of displeasure gained from it: “[t]he very essence of virtue [...] is to produce pleasure, and that of vice to give pain” (T 2.1.7, 295). Also our sensitivity to the approval or disapproval of others can be a basis for our moral feelings. Sympathy as a mechanism of understanding or the capacity to feel the passions of others enables us to transcend from the subjective point of view to a common one. Passions and sentiments motivate actions, not reason (T 2.3.3, 413).

So far this sounds like something animals could also have: refined use of reason is not needed for morality, and passions such as the feelings of pleasure and displeasure are important in it. Hume claims, however, that animals are not moral agents. The perception of moral qualities requires a special moral sense. Animals do not have it, which makes them incapable of perceiving them. This entails that the same act—stealing, for example—can be morally wrong if performed by a human, and outside morality if performed by an animal (for Hume’s argument, see T 3.1.1, 466–7). Human dependence of social relations is an important factor here.

## ***6. Hume and the experience of rational animals***

How does all this affect our relation to animals? Although Hume's view of animals seems to be quite high, he does not write much on animal ethics. There is, however, one exception in his *Enquiry Concerning the Principles of Morals* (3.1, 190):

Were there a species of creature intermingled with men, which, though rational, were possessed of such inferior strength, both of body and mind, that they were incapable of all resistance, and could never [...] make us feel the effects of their resentment; the necessary consequence, I think, is that we should be bound by the laws of humanity to give gentle usage to these creatures, but should not, properly speaking, lie under any restraint of justice with regard to them, nor could they possess any right or property, exclusive of such arbitrary lords. Our intercourse with them could not be called society, which supposes a degree of equality; but absolute command on the one side, and servile obedience on the other. Whatever we covet, they must instantly resign: Our permission is the only tenure, by which they hold their possessions: Our compassion and kindness the only check, by which they curb our lawless will [...]. *This is plainly the situation of men, with regard to animals.* (My emphasis)

Animals do not belong to the same moral community with us, but this does not mean that we can use and treat them any way we please. We should, instead, be benevolent, compassionate and kind toward them if we are, as we should, to act according to "the laws of humanity." For Hume, humanity is the source and the motive of all virtuous action: "No action can be virtuous, or morally good, unless there be in human nature some motive to produce it, distinct from the sense of its moral-

## ***6. Hume and the experience of rational animals***

ity” (T 3.2.1, 479, emphasis removed). The objects of moral concern are not restricted to our own species, but to all creatures we feel sympathy towards (T 3.2.1, 481). Human nature has a tendency to feel sympathy to animals, which gives us a motive to ensure that the animals on our responsibility are well.<sup>56</sup> Animals can be moral objects without being moral subjects (see, for example, Reader 2007, 19).

### **6.6. CONCLUSION**

In this chapter, I have made two claims. My first concerned the approaches of Kant and Hume to reason. Kant and Hume understand reason differently and therefore we cannot compare their views on animals without first defining what each one means by reason. In this way, we can see that what Hume explains as animal use of reason is for Kant only the use of sensible association. Hume does not argue that animal reason were identical to human reason, and when we look at the operations of reason he excludes from animals, we can see that Hume’s idea of human reason corresponds to Kant’s understanding of the higher cognitive faculty.

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<sup>56</sup> Of course, not all animals are “possessed of such inferior strength, both of body and mind, that they [are] incapable of all resistance” or unable to “make us feel the effects of their resentment.” It is easy to find an example of animal resistance by trying to wash a cantankerous housecat. But even if animals were not capable of expressing their opinion to us, we would still be morally obliged to treat them well, and the fact that animal resistance to bad treatment is often obvious gives us even a stronger obligation to do so.

## ***6. Hume and the experience of rational animals***

My second claim concerned the views of Kant and Hume on treating animals. Reason has a large role in Kant's ethics. It would therefore be easy to think that if we accepted the idea that animals have reason, as Hume does, it would radically affect their moral status. Hume's approach to ethics is quite different from Kant's: Hume thinks that there is not much that reason has to do with it; morality rather belongs to sensibility. Now, we would think that this gives us even stronger support for the high moral status of animals.

However, in both theories, the actual faculties of animals have little to do with how we should treat them. Kant bases our indirect duty to treat animals well on the view of animals as analogies of rationality while their moral status still remains lower than that of rational humans. For Hume, the ultimate motivation for the good treatment of animals lies in the natural tendency of humans to feel sympathy across species, not in the mental capacities of animals. The metaphysical view of the minds of animals does not straightforwardly imply any particular view of the moral status of animals. It is important to understand that the moral decisions concerning animals require other kind of justification than just premises that concern their mental capacities and what they enable. Both Kant and Hume argue that whatever the cognitive capacities of animals might enable or exclude, due to the apparent fact that animals seem to have similar interests as humans do, they should be treated with respect.

Just as Kant's and Hume's views concerning the differences between animal and human minds are very different, so are their approaches to ethics. What Kant regards as the sole possible foundation of morals is from Hume's viewpoint completely insufficient, and vice versa. However, the conclusions that Kant and Hume draw in both issues are

## ***6. Hume and the experience of rational animals***

very similar despite the completely different foundational assumptions and routes to these conclusions. Kant bases morality on the universal truths of reason, and concludes that we have an indirect duty to treat animals well. The good treatment of animals shows that we are good human beings. The fact that we notice that the principle of animal behavior is the same as ours is sufficient to obligate us to take animals into account in the moral respect, not so much for the sake of the animals but because of our humanity. Also Hume argues that since we can feel sympathy for animals and since we have no reason to assume that they had a different principle of action as we do, we are morally obliged to treat them well.

To sum up, both Hume and Kant think that animals matter because they show strong signs of having interests just like we do. We know that our interests matter and we expect other people to honor them, as far as they are cognitively capable of it. This obligates us to honor the interests of other beings as well, and this includes animals, even if they cannot honor our interests. However, the extent to which we take the interests of animals into account depends solely on our good will (in Kant's terms) or the laws of humanity (in Hume's term). Humans obligate us morally more strongly because of their rationality which has an inherent value (in Kant's view), or which makes them members of the moral community (in Hume's view).

The theory of evolution is a challenge to Kant's view of animals and of animal ethics. If there is no strict dividing line between rational and non-rational creatures, we need to redefine the scope of beings that deserve to be treated as ends-in-themselves and are therefore objects of direct moral concern. Hume's view avoids this difficulty by allowing gradual changes.

## ***6. Hume and the experience of rational animals***

An issue that deserves further investigation is whether humans really are the only moral beings. Current research no longer completely excludes the idea of moral nonhuman animals (see Rowlands 2012 for an extensive overview on the subject). The idea of animals as possible moral subjects raises a multitude of questions concerning primarily the mental capacities of animals and the foundation of morality. If some species of animals show sufficiently strong signs of moral behavior, the views of Kant and Hume of animals as beings beyond morality is refuted. The task of the philosophers is to specify the theoretical and cognitive criteria of moral subjectivity.



## *7. Summary and conclusion*

### **7. SUMMARY AND CONCLUSION**

This study has been an answer the question posed right at the beginning of the introduction: What is the role of sensibility in Kant's philosophy, and how is it manifested in animals? I have argued that the role of sensibility is wider than usually thought. This makes some animals capable of quite complex cognitive operations. Animals are not completely under the influence of flowing sensible representations, reacting to the stimuli they contain determined through their physiological constitution. This is a part of being an animal, but not the whole picture.

I claim that it is compatible with Kant's view that animals do feel their sensible representations, and that they can use the information provided by them in planning their action. They have the capacity to keep past representations in the mind and reproduce them even without the actual presence of the object itself. Furthermore, it is possible, within the sphere of sensibility, to classify the object according to one's own interests without this amounting to the use of the forms of the understanding. All this is still linked to their current context, of which they cannot detach themselves.

I have also argued that Descartes, Kant and Hume do not disagree as much on the actual mental capacities of animals as on the terms in which this is being expressed, that is, the definitions and scope of the concepts of sensibility and reason. For Descartes, sensibility is mechanical receptivity and reactivity. Depending on the interpretation of Descartes, this either feels like something or does not feel like anything. According

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to the standard interpretation, the ability to think is required in order to feel one's sensations. It can also be argued that Descartes' view does not exclude animal experience, but I think this is more a development of his theory than an interpretation of it.

Kant considered it necessary to accept that animals have minds since they clearly move determined by their sensible representations rather than by laws of physics. Sensibility provides a perceptual contact to the objective world; and having sensible representations is a sign of having a mind. I have broadened the common understanding of what sensibility does in Kant's philosophy, and also narrowed the role of reason in experience. In other realms, such as in ethics, reason has a significant role, but not in experience. Experience is rich already at the non-conceptual level. The phenomenal conscious experience does not require concepts. It certainly feels like something; it includes the discomfort of wants and needs and the comfort of fulfilling them. What it does not manage is putting these experiences and undertakings into judgments. It always remains particular and tied to the current context.

One could ask why Kant did not simply say that since animals have the capacity of keeping mental pictures in mind and making distinctions, they are in fact using some kind of elementary concepts that do not require explicit naming and ultimate abstraction. After all, ascribing representational contents to animals was no problem for Hume among several other early modern philosophers. I have emphasized that Kant wanted to keep the roles of sensibility and reason clearly separate. The former is needed for perception, the latter for judgment.

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But as we have seen, sensibility is not only about perception. It is also memory and reproduction, planning, orienting; trying to succeed better next time. All this can happen without conceptually understanding it, whereby all this remains still quite mechanic, as relatively immediate reactions without much possibility of directing one's behavior, with no access to generality and universality. For Hume, one central role of reason is causal reasoning. Since causal relations cannot be perceived through the senses, they must be products of the mind. Hume also counts rather automatic inferences and conditionings as uses of reason. Reason is for him fundamentally an instinct.

Kant explains elementary causal conditionings through association that is made possible through sensible imagination. Reason adds understanding of the causal relation; however, the lack of reason does not prohibit using the relations between objects that reason classifies as causal. In other words, causality is a way of conceptualizing a certain relation between objects, but reason changes nothing in the objects nor adds anything between them. Without reason, the objects that can be understood as having this relation to each other can be perceived, and if they are repeatedly perceived with each other, imagination starts to associate them with each other without this amounting to an understanding of a causal relation.

Throughout this study, I have pointed out that these early modern views are unaffected by the theory of evolution, and that the theory of evolution might challenge the differentialistic view. The theory of evolution does not, however, imply that the difference between human and animal minds is necessarily only a difference in degree. Language was a major

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argument for Descartes against animal minds, and it even today it can be used as an argument, if not against animal minds, at least for the superiority of human mind in conceptual understanding.

Great apes are considered cognitively very similar to us but this does not exclude the possibility of a relevant difference in kind. For example, Cheney and Seyfarth (2007, 279) claim that “it remains indisputable that the human mind differs qualitatively from that of other apes.” By this qualitative difference, they refer to unique human traits such as “speech, teaching, elaborate tool use, and culture.” The neurological foundation of these capacities lies in brain areas that also are uniquely developed in humans.<sup>57</sup>

Here, the relevance of our understanding of the kind of the difference between animal and human minds could be questioned. What difference does it make if we thought—as Kant did—that reason is an exclusive human capacity; or if we follow Hume in seeing reason as a shared capacity between animals and humans? What issues does our view of animal minds affect, and how? First of all, it is of utmost importance first to define what is meant by reason and what counts as sensibility in each relevant context so that we know how our view relates to others. As I have shown, there is a huge variation in the ways of using these concepts. What Hume counts as understanding in animals is for Kant still in the sphere of sensibility.

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<sup>57</sup> However, soon after having said this, Cheney and Seyfarth continue by showing how apes also do have these capacities, but in a far simpler form. Now this sounds like a quantitative difference. This comes close to Hume’s view of animals: humans do not have any extra capacities compared to animals, but they are capable of a far larger use of their capacities.

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*Prima facie* ascribing reason to animals might seem like a more animal-friendly and morally more recommendable practice than denying it. Claiming that animals do not have reason easily associates with the implication that reason is the most precious of all mental qualities. This is, however, not necessarily the whole truth. As I have shown, the role of reason does not have to be this decisive. For Kant, reason is responsible only of such cognitive tasks that require concepts; and for Hume, reason is a natural instinct that enables action according to representations. The views of the cognitive difference can come very close to each other even though the terms used in describing these views clearly contradict each other. Only when this definition of sensibility and reason is carefully made we can assess and compare different views of animal experience.

To conclude, I want to discuss briefly the possible application of the results of this study to animal ethics. As such, our views of animal experience do not, without relevant further premises, imply any kind of ethical standpoint in regard to the treatment of animals. I leave such premises open to further studies. However, if experience is to entail the capacity to suffer, this is important in animal ethics. As Bentham (1982, 28n) has famously stated, what matters in the treatment of animals is the capacity to suffer, not the capacity to reason.

If a being is capable of suffering, it is important to do our part to ensure that we minimize this. In practice this means that we care for the welfare of the animals for which we are responsible. This is not fulfilled by following the minimal claims of the Protection of Animals Act. It is necessary that they be followed, but not necessarily sufficient. If we claim that this species is rational while that one is not, this does not necessarily

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make the former species morally superior. That one particular species is in certain respects, for instance, in rationality, similar to us, does not directly, without further theoretical suppositions, mean that the species would intrinsically have a higher moral worth than others. It means only that we are in the position to understand this particular species in this particular respect more than others that are cognitively more different from us.

We can take deep sea fishes as an example of a species whose mental equipment is very different from ours. They are adapted to conditions we could not survive in, conditions characterized by enormous pressure and a complete lack of daylight. To survive in these conditions, these creatures have developed special capacities such as the sense of changes of pressure, or bioluminescence. It is, however, highly probable that distress is a mild word to describe how an anglerfish experiences the rapid decrease of pressure that slowly makes it almost explode when it is hauled out of the sea by a fisherman.

However, this is not the same distress as humans would experience when exposed to a similar conditions. We would be terrified not only by the pain but also by the desperate feeling that our unfinished life projects will never be accomplished and that our death will dramatically change the lives of our loved ones. Still, we can ask whether the experiences of two very different species can be compared with each other at all.

What is similar between me and the anglerfish is sensibility, even if it operates through very different means in the anglerfish than in me. Perhaps the anglerfish is also capable of some kind of reproduction

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and memory. Nevertheless, due to this one resemblance, the capacity to become affected through the environment, we are capable of at least a suspicion of the understanding, of what it is like to be a deep sea creature and what matters to the creature. We are even more capable of taking into account the interests of other animals that are more similar to us than the deep sea creatures. There always is the possibility that we are wrong, and that the experience of other animals is in reality something very different from what we expect, but as Hume argues in the quotation presented in Chapter 6.5. (*Enquiry Concerning the Principles of Morals* 3.1, 190), we should nevertheless treat other species with respect, just in case that this matters to them and because we can.

Kant's view of animals as beings with sensible minds already adds mentality to the Cartesian view of animals; and experience to the standard reading of Descartes. Already this ascribing of minds makes animals more similar and thus more accessible to us and increases our moral obligations to them. Now compassion is possible and justified, even though it plays no role in Kant's deontological ethics. However, if it were indisputable that some nonhuman species had reason in the strict Kantian sense, it would affect its moral value. Rationality as a capacity to set ends for oneself makes beings ends in themselves, that is, it guarantees their inherent moral value. This in turn would force Kant to say that there is a difference in degree between humans and other rational species, and a difference in kind between rational species and non-rational species.

This study has shed some light on what sensible experience can amount to. I have been as conclusive as possible in this matter but this topic can

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always be broadened. One issue that I have omitted but which deserves a closer look is whether schemata could be attributed to animals. The function of the schemata is to guide us in applying concepts to perceptions (see Chapter 4.3.).

Another important topic that also remains for further investigation is the relation of the early modern views to the current views of animal experience. This requires collaboration with cognitive ethologists: how is this view applicable to practice? Is it old-fashioned; is there perhaps proof of such conceptual capacities of animals that Kant cannot explain through imagination? If we find such capacities, it does not mean that Kant was wrong. What Kant was primarily interested in was sensibility, not animal minds. It was only his hypothesis that animals are an example of merely a sensible way of perception. Such findings would only show that this hypothesis does not concern all nonhuman animal species, but not that this is not the way in which sensibility works.



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